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of Transportation

**National Highway  
Traffic Safety  
Administration**

400 Seventh Street, S.W.  
Washington, D.C. 20590

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[REDACTED], INC.

AIR BAG ACCIDENT INVESTIGATION

CASE NO. 93-04

[REDACTED], MICHIGAN

TECHNICAL REPORT

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

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[REDACTED], INC.

AIR BAG ACCIDENT INVESTIGATION

CASE NO. 93-04

[REDACTED], MICHIGAN

Contract No. DTHN 22-87-C-17169

Prepared for:

U.S. Department of Transportation  
National Highway Traffic Safety Administration  
Washington, D.C. 20590

### Summary

This report is an in-depth vehicle accident study involving a 1993 Dodge Intrepid (case vehicle), a 1992 Plymouth Sundance (Vehicle 2), and a 1986 Buick Century (Vehicle 3). The Intrepid was equipped with both a driver's side and passenger side supplemental air bag system which deployed during the accident. The Sundance was equipped with a driver's side supplemental air bag system which also deployed during the accident.

The accident occurred on State Route [REDACTED] in [REDACTED], Michigan. The Intrepid was travelling southbound in the number three lane (third lane from the curb). The Sundance was also travelling southbound in the number one lane. The Century was travelling northbound in the number one lane. According to witnesses, the Century attempted a left hand turn from the number one lane (crossing six lanes of traffic) into a private business entrance. The Century avoided collisions with all other northbound traffic but was initially struck on the right side with the front end of the Intrepid. After initial impact with the Intrepid, the Century began to rotate in a clockwise direction. As it crossed into the number one southbound lane it was struck on its left side by the front left corner of the Sundance. These two vehicles experienced some snagging and rotated together in a counter-clockwise direction. The Sundance separated from the Century, continued to rotate in a counter-clockwise manner, tripped on its right side wheels and rolled one quarter turn impacting a luminaire pole with its roof. The luminaire pole was located on the west roadside.

Following impact, the Intrepid rotated clockwise approximately eighty degrees, coming to rest nearly sideways and occupying both the number two and three southbound lanes. The final resting position of the Sundance was approximately fifty degrees counter-clockwise from its original heading. The Sundance came to rest on its right side with its roof against a luminaire pole located on the west roadside. The Century came to rest facing north in the number one southbound lane. No physical evidence was present at the time of scene inspection other than scattered vehicle debris (swept to the west roadside) and the struck luminaire pole.

The Intrepid was nearly completely repaired at the time of inspection. The interior, however, had not yet been repaired including both the driver's and passenger's air bags. Several conclusions could be deduced based on the investigation, body shop personnel statements, and interviews. The Intrepid sustained nearly full frontal direct damage with a probable (but undocumented) CDC of 11-FDEW-2. This is based on the corresponding damage to Vehicle 3, body shop descriptions, and the following list of replaced parts: windshield (stress damage only), hood, both

front fenders, radiator assembly, front core (bumper), grille, RF frame rail, and the power steering and air conditioning pulleys. All doors remained fully functional with no damage. The investigation revealed no available photographs of this vehicle's damage. No computer models could be employed to determine a Delta-V for the Intrepid/Sundance impact as the front damage information for the Intrepid was unknown. Vehicle 3 was assigned a CDC of 02-RZEW-3 for this impact.

The driver of the Intrepid, who was protected by her manual lap and shoulder belt as well as a driver's side air bag, sustained muscle strains to the thoracic and cervical spine areas, an abrasion to the right forearm, and a contusion to the left ring finger. The RF passenger, who also was protected by a manual lap and shoulder belt as well as a passenger side air bag, sustained an abrasion to his right lower leg and claimed some swelling to all digits on both hands. The two rear seat occupants also were protected by manual lap and shoulder belts and claimed no injuries.

The Sundance (Vehicle 2) impacted Vehicle 3 in the number one southbound lane. Vehicle 3 was in a rapid clockwise rotation at the time of impact with Vehicle 2. The assigned CDC for Vehicle 2 was 12-FRAE-9 as the impact initiated through the frontal plane and left side damage extended 40 cm rearward of the rear axle. Vehicle 3 was assigned a CDC of 10-LDEW-3 for this impact. While a CRASH III computer model was executed for this impact (see Appendix D), physical evidence demonstrates that significant snagging occurred during this collision which invalidates the model. Vehicle 2 and 3 rotated together in a clockwise direction. Upon separation, Vehicle 3 rolled backward to its final resting position while vehicle 2 continued to rotate until it tripped on its right side wheels. Vehicle 2 rolled one quarter turn and impacted a luminaire pole where it came to its final resting position. This resulted in two additional CDCs being assigned to Vehicle 2 of 00-RDAO-2 and 00-TPDN-2.

The driver of Vehicle 2, who was protected by a manual lap and shoulder belt as well as a driver's side air bag, sustained only minor lacerations across her face and a minor abrasion to her right wrist.

Driver 3 was not interviewed and received unknown type injuries. Inspection of Vehicle 3 indicated that this driver was protected by a manual lap and shoulder belt.

The PAR listed all three drivers as being transported to a [REDACTED] [REDACTED]. Interviews with drivers 1 and 2 confirm at least their treatment status. As NCSI's In-depth Investigation Team was recognized by the hospital as a valid research organization, no medical release was required by this hospital. Repeated contact, however, revealed an inability to find any record of treatment for the three victims in question.

Gravel  
Shoulder

Bituminous Surface  
Well Worn

Bituminous  
Shoulder

Concrete Merge  
Lane

N

No Left Turn →

All legs  
measure level

1:250

All measurements  
in meters

3.5

3.6

3.6

3.6

4.0

3

3.6

3.7

4.0

3.5

RL

125 Meters to

Concrete  
Surface

NCSI IN-DEPTH ACCIDENT INVESTIGATION  
AIR BAG ACCIDENT INVESTIGATION

FLEET - Private Owner  
LOCATION - [REDACTED], Michigan  
CASE NO. - 93-04

IDENTIFICATION

Location/Street: State Route [REDACTED]  
Area/Type: Urban/Commercial  
Accident Date/Time: [REDACTED] 1993 at [REDACTED] hours  
Notification Date: [REDACTED], 1993  
Investigating Police Agency: [REDACTED]  
Accident Type: Car v. Car, Angle  
Car v. Car, Angle  
Car v. Rollover into Pole  
Case Vehicle (V-1)  
Occupant Injury Severity: AIS-1, Minor

AMBIENCE

Viewing Conditions: Daylight  
Weather: Cloudy  
Precipitation: Light rain (contrary to PAR)  
Road Surface: Wet (in agreement with PAR)

ROADWAY

Location: [REDACTED]  
Type: Arterial  
Width: 26 meters  
Number of Lanes: Seven (turn lane included)  
Median: Center turn lane, 4 meters wide

# ROADWAY, CONTINUED

Surface Material:	Asphaltic aggregate, polished
Road Edge:	West side, paved East side, gravel
Traffic Density:	Moderate to heavy
Coefficient of Friction:	.55 (estimated)
Vertical Alignment:	Level, all approaches
Horizontal Alignment:	Straight, all approaches

## TRAFFIC CONTROLS

Signals/Signs:	Signals present but inactive at time of collision
Speed Limit:	72 KPH (45MPH)

## VEHICLES

	Case Vehicle	Vehicle 2	Vehicle 3
Year:	1993	1992	1986
Make:	Dodge	Plymouth	Buick
Model:	Intrepid	Sundance	Century
Body Style:	4 Door	3 Door	4 Door
VIN:	2B3ED56T8PH*	3P3XP64K2NT*	1G4AL19R1GT*
Exterior Color:	Gray	Blue	Brown
Odometer Reading:	10,716 KM	5,612 KM	117,725 KM
Securiflex Windshield:	Not Present	Not Present	Not Present
Windshield Damage:	Yes	Yes	Yes
Engine:	V6, 3.3L	I4, 2.2.L	V6, 3.8L
Transmission:	Automatic, Floor Mount	Automatic, Floor Mount	Automatic, Column Mount
Steering:	Power Assisted	Power Asstd.	Power Asstd.

## VEHICLES, CONTINUED

	Case Vehicle	Vehicle 2	Vehicle 3
Brake System:	Front Disc, Rear Drum	Front Disc, Rear Drum	Front Disc, Rear Drum
Interior Padding:	Instrument panel, door panels, arm rests, head restraints, sunvisors	Instrument panel, door panels, arm rests, head restraints, sunvisors	Instrument panel, door panels, arm rests, head restraints, sunvisors
Driver Active Restraint System Availability:	Active 3 point	Active 3 point	Active 3 point
Driver Active Restraint System Usage:	In use	In use	In use
Usage Sources:	Inspection, PAR, Interview	Inspection, PAR, Interview	Inspection, PAR
Passive Restraint System:	Driver and Passenger Air Bag	Driver Air Bag	None
Passive Restraint Function:	Proper Deployment	Proper Deployment	N/A
VEHICLE DAMAGE			
Object Struck:	Vehicle 3	V3, rollover, luminaire pole	V1, V2
Event Number:	1	2,3,4	1,2
Damage Location:	Front	F, R, T	R, L
CDC:	99-F9EW-9	12-FLAE-9 00-RDAO-2 00-TPDN-2	02-RZEW-3 10-LDEW-3
Tow Status:	Towed due to damage	Towed due to damage	Towed due to damage



## VEHICLE DAMAGE, CONTINUED

### Exterior Damage:

#### Case Vehicle (V1):

The frontal surface of V1 struck the right rear quarter panel of V3. V1 was under repair at the time of inspection and the damaged parts were no longer available. No photographs were available showing V1's damage. The following parts were damaged and replaced by the body shop: bumper/nose cone, core support, hood, RF fender, LF fender, radiator, power steering pulley, air conditioning pulley, grille, RF frame rail, and windshield. An interview with the repairman revealed the following: the windshield suffered from stress fracture damage only - no spiderweb or impact damage present, no tire or wheel damage occurred, no steering system damage occurred, and no door, hinge or latch damage occurred.

#### Vehicle 2:

Vehicle 2's initial impact was at the LF bumper corner as V3 was rotating into V2's path (post-impact trajectory from impact #1 with V1). V2 struck the LR quarter panel of V3. The two vehicles were in a side-to-side impact configuration at maximum engagement. V2 sustained minimal frontal damage as maximum crush at the bumper corner was 9.5 cm, however, damage extended 373 cm down the left side of the vehicle. Damage patterns to the two vehicles indicate that a snag occurred as the vehicles rotated clockwise together. The damage to V2's front and left side was judged to be one continuous impact and a CDC of 12-FLAE-9 was assigned. Damaged components from this impact included the front bumper, left fender, left door, left A-pillar, left quarter panel, hood, and windshield. Damage from the rollover sequence was assigned a CDC of 00-RDAO-2 and displayed minor surface damage to all components on the right side. The impact with the luminaire occurred while the vehicle was on its side. This impact was also relatively minor and assigned a CDC of 00-TDPN-2. No intrusions occurred as a result of this impact. The direct damage consisted of a 7 cm wide dent that extended laterally between the roof rails at the B-pillars.

#### Vehicle 3:

Vehicle 3 was initially struck on the right rear quarter panel by the front of V1. Direct damage was measured to be 164 cm with a field L of 187 cm. A D value was calculated to be -158 cm. Damage was restricted to the rear bumper corner, right rear quarter panel, right rear door, and trunk lid. Maximum crush was measured to be 31.3 cm and located at C3. A CDC of 02-RZEW-3 was assigned.

Vehicle 3's second impact was located on the left side of this vehicle. Direct damage indicated that the left front bumper corner of V2 impacted the left rear wheelwell area of V3 just behind the

#### VEHICLE DAMAGE, CONTINUED

tire. The damage extends from the left rear bumper corner to 36 cm forward of the left front axle. Direct damage was measured to be 396 cm while the field L was measured at 400 cm. The D value was calculated to be -25 cm. Maximum crush was measured to be 40 cm and located at C2. A CDC of 10-LDEW-3 was assigned for this impact. The LR and RR tires showed excessive wear including exposure of the steel cords.

#### Interior Damage:

##### Case Vehicle (V1):

Interior damage to the case vehicle was minimal. A total of eleven occupant contacts were noted: four cloth transfers were noted on the driver's knee bolsters, two scuffs on the instrument panel below the passenger air bag compartment, one scuff on the rear of each front seatback, a crack in the plastic cover of the lower right B-pillar, a lipstick transfer on the driver's air bag, and a scuff on the passenger side air bag. The rear view mirror was knocked off its mounting position (on the upper center windshield) which is believed to not be associated with occupant contact. The windshield suffered stress fracture damage (per body shop personnel). The vehicle interior demonstrated no integrity loss or intrusions. The distance between the front seat positions and the air bag modules were measured as follows: LF - headrest to top of steering wheel was 79 cm, front of seat bottom to dash was 18 cm, RF - headrest to front of dashboard was 77 cm, front of seat bottom to bottom of glove box was 30 cm. These measurements represent the front seats at their forward most position. This position was verified during the driver interview.

##### Vehicle 2:

Vehicle 2 showed integrity loss as both right and left front windows were disintegrated during the course of the accident. The windshield displayed both contact and stress fracture damage. Intrusions were noted at the left rear seating position of the door panel and B-pillar (11 and 14 cm, respectively). Very minor (not codeable) intrusion was noted at the driver's door panel (2.5 cm). No damage or intrusion was noted to either the vehicle dashboard area or the roof. A total of three possible occupant contacts were noted: two separate lipstick transfers on the driver's air bag and a spiderweb-type fracture to the windshield in the passenger side area.

##### Vehicle 3:

The passenger compartment of Vehicle 3 displayed a total of eight intrusions. Five of these were codeable while three were not. The intrusions noted were as follows: left C-pillar, LR door panel,

#### VEHICLE DAMAGE, CONTINUED

left B-pillar, right C-pillar, RR door panel, LF door panel, LR roof rail, and LF roof rail. Corresponding intrusion amounts were noted as: 33.5, 29.6, 8.0, 6.0, 4.5, 1.5, 1.5, and 1.0 cms. respectively. Seven occupant contact points were also noted: left sunvisor, left A-pillar, right side windshield, LF armrest, left door surface, left B-pillar, and the RF headrest.

#### COLLISION SEQUENCE

##### Pre-Crash:

At approximately [REDACTED] hours on [REDACTED], 1993, the case vehicle, a 1993 Dodge Intrepid equipped with both driver's side and passenger side air supplemental air bag restraint systems, was travelling southbound in the number three lane of SR-[REDACTED] in [REDACTED] Michigan. A 1992 Plymouth Sundance was also travelling southbound on SR-[REDACTED] but in the number one lane and slightly behind the Intrepid. A 1986 Buick Century was travelling northbound in the number one lane of SR-[REDACTED]. For unknown reasons, the Century made a wide left turn, crossing several lanes of traffic and into the southbound lanes.

##### Crash:

The frontal surface of the Intrepid struck the right rear surface of the Century as the Century crossed the Intrepid's path of travel. The collision was of sufficient magnitude to cause deployment of the Intrepid's driver and passenger air bag modules.

##### Post-Crash:

After impact with the Century, the Intrepid rotated approximately eighty degrees and came to a rest occupying both the number two and three northbound lanes. The Century rotated approximately ninety degrees while its CG continued to move in a westerly direction across the southbound lanes. The Century was then struck on the right side by the Sundance with its front left corner. The two vehicles rotated together in a counterclockwise direction (some snagging occurred) while their CGs travelled in a south westerly direction. As the vehicles separated, the Century rolled backwards in a southerly direction and came to rest facing north in the number one southbound lane. The Sundance, while rotating counterclockwise and traveling in a south westerly direction, left the travel lanes and tripped on its right wheels. The Sundance rolled one quarter turn and impacted a luminaire pole with its roof. The Sundance came to rest on its right side, against this pole, facing south/southeast.

#### Police Activities:

The [REDACTED] was notified of the accident at [REDACTED] hours. Response time was not reported. No photographs were taken by the police.

#### Rescue Activities:

No vehicles displayed signs of extrication equipment usage. According to PAR information and interviews, all three drivers were taken to a [REDACTED]. A record search revealed that no record of treatment could be found for any of the three victims.

#### VEHICLE VELOCITY ESTIMATES

A CRASH III computer reconstruction could not be executed for impact #1 (between case vehicle and vehicle 3) due to lack of damage information on the case vehicle. An OLDMISS computer reconstruction of this impact also could not be executed as the end damage information was lacking. The impact, however, was of sufficient magnitude to cause deployment of the Intrepid's air bag modules.

A CRASH III computer reconstruction was executed for impact #2 (between V2 and V3) and yielded a speed change (Delta-V) of 19 KPH for V2 and 18 KPH for V3. This reconstruction should be considered as borderline due to the two vehicles snagging while in rotation.

#### RELEVANT SAFETY ISSUES

Applicable Standards: FMVSS 208

Occupant Crash Protection: The 1993 Dodge Intrepid was equipped with a factory installed driver and passenger supplemental air bag restraint system. Both air bag modules deployed on impact, reducing the severity of the injuries to the driver and right front passenger.

The 1992 Plymouth Sundance was equipped with a factory installed driver supplemental air bag restraint system. The driver air bag module deployed on impact, reducing the severity of the injuries to the driver.

#### HUMAN FACTORS/OCCUPANT DATA/CASE VEHICLE

##### Driver Data

Age: 37

Sex: Female

# HUMAN FACTORS/OCCUPANT DATA/CASE VEHICLE

## Driver Data, Continued

Height:	170 cm
Weight:	68 kg
Posture:	Normal, upright, both hands on wheel
Ejected:	No
Entrapped:	No
Active Restraint System Usage:	3 point lap and shoulder belt
Usage Source:	Vehicle inspection, PAR, interview
Physical State:	No reported disorders
Psychological State:	Apparently normal
Vision:	Eyeglasses worn, corrected to 20/20
Jewelry Present:	Ring worn on ring finger of each hand
Driver Education:	High school program
Vehicle Familiarity:	Good
Trip Plan:	To home
Route Familiarity:	Daily
Manner of Leaving Scene:	Ambulance
Type of Medical Treatment:	Treated and Released

## DRIVER INJURIES

Injury Description	Severity	Source
Cervical Strain	Minor, AIS-1	Restraint System
Thoracic Strain	Minor, AIS-1	Restraint System
Abrasion, Right Forearm	Minor, AIS-1	Air Bag
Contusion, Left Ring Finger	Minor, AIS-1	Air Bag

## HUMAN FACTORS/OCCUPANT DATA/CASE VEHICLE

### Driver Data, Continued

#### Injury Coding (NASS CDS Protocol)

1st 7-6-4-02-78-1-6-41-1-1-00  
2nd 7-6-4-04-78-1-7-41-1-1-00  
3rd 7-7-9-02-02-1-1-45-1-1-00  
4th 7-7-9-04-02-1-2-45-1-1-00

#### Driver Kinematics

The driver was apparently seated in a normal position behind the wheel, both hands on the wheel, left foot on the floor and right foot on the accelerator. She was fully restrained by the active three-point lap and shoulder belt system of the Intrepid. In response to the frontal impact force she moved forward relative to the vehicle interior, striking the deployed air bag. Her knees struck the bolsters below the steering column although no injury was reported. Her arms were knocked off the steering wheel as a result of the air bag deployment causing an abrasion to the right forearm and a contusion to her left ring finger. Her eyeglasses remained on her face, somewhat ajar, but did not cause injury or damage to either the eyeglasses or air bag.

## HUMAN FACTORS/OCCUPANT DATA/CASE VEHICLE/OCCUPANT #2

### Occupant Data

Age:	10
Sex:	Male
Height:	122 cm
Weight:	32 kg
Posture:	Normal, upright
Ejected:	No
Entrapped:	No
Active Restraint System Usage:	3-point lap and shoulder belt
Usage Source:	Vehicle inspection, PAR, interview
Jewelry Present:	No jewelry or eyeglasses present
Manner of Leaving Scene:	Unknown

HUMAN FACTORS/OCCUPANT DATA/CASE VEHICLE/OCCUPANT #2

Occupant Data, Continued

Medical Treatment: None

OCCUPANT #2 INJURIES

Injury Description	Severity	Source
Abrasion, Right Lower Leg	Minor, AIS-1	Air Bag

Injury Coding (NASS/CDS Protocol)

1st 7-8-9-02-02-1-1-45-1-1-00

OCCUPANT KINEMATICS

The front right occupant of the Intrepid was fully restrained by the active three-point lap and shoulder belt system of the Intrepid. Upon impact with the Century, he moved forward relative to the vehicle interior, striking the deployed passenger air bag. This caused an abrasion to his right lower leg (just below the knee area).

HUMAN FACTORS/OCCUPANT DATA/CASE VEHICLE/OCCUPANT #3

Occupant Data

Age: 14

Sex: Male

Height: 178 cm

Weight: 66 kg

Posture: Normal, upright

Ejected: No

Entrapped: No

Active Restraint  
System Usage: 3-point lap and shoulder belt

Usage Source: Vehicle inspection, PAR, interview

Manner of Leaving Scene: Unknown

Medical Treatment: None

# HUMAN FACTORS/OCCUPANT DATA/CASE VEHICLE/OCCUPANT #3

## Occupant Data, Continued

### OCCUPANT INJURIES

The left rear occupant of the Intrepid (Occupant #3) was not injured in this collision.

### OCCUPANT KINEMATICS

The left rear occupant was fully restrained by the active three-point lap and shoulder belt system of the Intrepid. In response to the frontal impact force, he moved forward relative to the vehicle interior. Apparently the hands of this occupant struck the rear of the seatback in front of him without causing injury.

# HUMAN FACTORS/OCCUPANT DATA/CASE VEHICLE/ OCCUPANT #4

## Occupant Data

Age:	12
Sex:	Male
Height:	170 cm
Weight:	68 kg
Posture:	Normal, upright
Ejected:	No
Entrapped:	No
Active Restraint System Usage:	3-point lap and shoulder belt
Usage Source:	Vehicle inspection, PAR, interview
Manner of Leaving Scene:	Unknown
Medical Treatment:	None

### OCCUPANT INJURIES

The right rear occupant of the Intrepid was not injured in this accident.



#### HUMAN FACTORS/OCCUPANT DATA/CASE VEHICLE/OCCUPANT #4

##### Occupant Data, Continued

##### OCCUPANT KINEMATICS

The right rear occupant of the Intrepid was in a normal, upright position and fully restrained by the active three-point lap and shoulder belt of the Intrepid. In response to the frontal impact force, he moved forward relative to the vehicle interior. Apparently the hands of this occupant struck the rear of the seatback in front of him and his right foot struck the lower B-pillar without causing injury.

#### HUMAN FACTORS/OCCUPANT DATA/VEHICLE #2

##### Driver Data

Age:	26
Sex:	Female
Height:	173 cm
Weight:	61 kg
Posture:	Normal, upright, both hands on wheel
Ejected:	No
Entrapped:	No
Active Restraint System Usage:	3-point lap and shoulder belt
Usage Source:	Vehicle inspection, PAR, interview
Physical State:	No reported disorders
Psychological State:	Apparently normal
Vision:	Contacts worn, corrected to 20/20
Jewelry Present:	None present
Driver Education:	High School program
Vehicle Familiarity:	Good
Trip Plan:	To home

## HUMAN FACTORS/OCCUPANT DATA/VEHICLE #2

### Driver Data, Continued

Route Familiarity: Daily  
Manner of Leaving Scene: Ambulance  
Medical Treatment: Treated and Released

### DRIVER INJURIES

Injury Description	Severity	Source
Multiple facial lacerations	Minor, AIS-1	Flying glass
Abrasion, right wrist	Minor, AIS-1	Air Bag

### Injury Coding (NASS CDS Protocol)

1st 7-2-9-06-02-1-0-91-1-3-00  
2nd 7-7-9-02-02-1-1-45-1-1-00

### DRIVER KINEMATICS

The driver was apparently seated in a normal position with both hands on the steering wheel, right foot on the accelerator and left foot on the floor. She was fully restrained by the active three-point lap and shoulder belt system of the Sundance. In response to the frontal impact force she moved forward relative to the vehicle interior striking the deployed driver air bag. The deployment of the air bag caused a minor abrasion to the right wrist of the driver. As the vehicle rotated in a counterclockwise manner and tripped on its right wheels, she apparently struck the air bag again as the vehicle rolled onto its side. This left a smearing type lipstick mark on the upper right portion of the air bag. During the course of the accident, both right and left front windows disintegrated causing several minor lacerations to the face of the driver.

## HUMAN FACTORS/OCCUPANT DATA/VEHICLE #3

### Driver Data

Age: 27  
Sex: Female  
Height: Unknown  
Weight: Unknown

### HUMAN FACTORS/OCCUPANT DATA/VEHICLE #3

#### Driver Data, Continued

Posture:	Unknown
Ejected:	No
Entrapped:	No
Active Restraint System Usage:	3-point lap and shoulder belt
Usage Source:	Vehicle inspection, PAR
Physical State:	No reported disorders
Psychological State:	Unknown
Vision:	Unknown
Jewelry Present:	Unknown
Driver Education:	Unknown
Vehicle Familiarity:	Unknown
Route Familiarity:	Unknown
Trip Plan:	Unknown
Manner of Leaving Scene:	Ambulance
Medical Treatment:	Unknown

#### DRIVER INJURIES

The driver of vehicle 3 suffered unknown type injuries (non-fatal).

#### LIST OF ATTACHMENTS

- Appendix A: Police Accident Report
- Appendix B: NASS/CDS Data Collection Forms
- Appendix C: Air Bag Supplement Forms
- Appendix D: CRASH 3 Output

## APPENDIX A

Compliance: Required  
Penalty: \$100 and/or 90 days

ORI: MI-6375100

## STATE OF MICHIGAN

## Traffic Crash Report

Complaint #

93-

File Class

Crash Date

Crash Time

Month Day Year Military

93

Department Name

Complaint Disposition

Reviewer

Open Closed

No. of Units	Crash Type	Special Circumstances	Weather	Light	Fatal (Report All)
1	1. Single Motor Vehicle	1. None	1. Clear	1. Daylight	<input type="checkbox"/>
2	2. Head On	2. Deer	2. Cloudy	2. Dawn	<input type="checkbox"/>
3	3. Head On-Left Turn	3. School Bus	3. Fog/Smoke	3. Dusk	<input type="checkbox"/>
4	4. Angle	4. Hit and Run	4. Rain	4. Dark-Lighted	<input type="checkbox"/>
5	5. Rear End	5. Fleeing Police	5. Snow/Blowing Snow	5. Dark-Unlighted	<input type="checkbox"/>
6	6. Rear End-Left Turn		6. Severe Wind	6. Other/Unknown	<input type="checkbox"/>
7	7. Rear End-Right Turn		7. Blast/Hail		<input type="checkbox"/>
8	8. Sidewipe-Same	Special Study	8. Other/Unknown		<input type="checkbox"/>
9	9. Sidewipe-Opposite	1. Local			<input type="checkbox"/>
	10. Other/Unknown	2. State			<input type="checkbox"/>

County	City/Twp	Traffic Control	Construction Zone	Activity	Relation to Roadway	Area	Road Condition	Total Lanes	Speed Limit
63	91	1. Signal 2. Stop Sign 3. Yield Sign 4. Not Present	(Mark One From Each Group) Type: 1. Const/Maint. 2. Utility Lane Closed: 1. Yes 2. No	1. On Road 2. Off Road 3. None	(Location of First Impact) 1. On Road 2. Median 3. Shoulder 4. Outside of Shoulder/Curb 5. Gore 6. Other/Unknown	1. Dry 2. Wet 3. Icy 4. Snowy 5. Muddy 6. Slippery 7. Debris 8. Other/Unknown	1. Dry 2. Wet 3. Icy 4. Snowy 5. Muddy 6. Slippery 7. Debris 8. Other/Unknown	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9

Location on: S/B  
Name: 500  
Intersection:   
 FT MI North South East West Beginning of Ramp End of Ramp

Unit Number	State	Driver License Number	Date of Birth	License Type	Sex	Hazard Action
1	MI	A	Month Day Year	O OY O F M R	M	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Phone Number: PD Box  
 Unit Type: MV  
 City:   
 Alcohol: HBD Yes No  
 Test Type: Break Urine Blood  
 Test Results: Refused Not Offered  
 (Amount Refused to RAMP When Available)

Vehicle Registration	Plate	VIN	Vehicle Description	Vehicle Direction	Special Vehicles	Vehicle Use	Vehicle Defect	Private Trailer Type
MI	1G4AL19R1GT		86 Buick 4 Dr	North East South West	1 2 3 4 5 6	1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6	1 2 3 4 5 6 7
Insurance								
Crash Date								
1st Damage								
Extent of Vehicle Damage								
Drivable								

First Name	Middle	Last	Date of Birth	Sex	Height	Weight	Eye Color	Hair Color
			Month Day Year	M F				
Street Address								
City	State	Zip						
Phone Number								
First Name	Middle	Last	Date of Birth <td>Sex <td>Height <td>Weight <td>Eye Color <td>Hair Color</td> </td></td></td></td>	Sex <td>Height <td>Weight <td>Eye Color <td>Hair Color</td> </td></td></td>	Height <td>Weight <td>Eye Color <td>Hair Color</td> </td></td>	Weight <td>Eye Color <td>Hair Color</td> </td>	Eye Color <td>Hair Color</td>	Hair Color
			Month Day Year	M F				
Street Address								
City	State	Zip						
Phone Number								

Witness	Owner	Uninvolved Passenger	Other	Name	Address	City	State	Zip	Age	Sex	Race

Do Not Write In This Area

UD-10 Form Number

Form Override Number

1 A500 A0

[illegible]

▲ Unit Reported Above									
Action Prior		Sequence of Events							
		First		Second		Third		Fourth	
1	1	30	1	1	1	1	1	1	1
2	2	31	1	1	1	1	1	1	1
3	3	32	1	1	1	1	1	1	1
4	4	33	1	1	1	1	1	1	1
5	5	34	1	1	1	1	1	1	1
6	6	35	1	1	1	1	1	1	1
7	7	36	1	1	1	1	1	1	1
8	8	37	1	1	1	1	1	1	1
9	9	38	1	1	1	1	1	1	1
10	10	39	1	1	1	1	1	1	1
11	11	40	1	1	1	1	1	1	1
12	12	41	1	1	1	1	1	1	1
13	13	42	1	1	1	1	1	1	1
14	14	43	1	1	1	1	1	1	1
15	15	44	1	1	1	1	1	1	1
16	16	45	1	1	1	1	1	1	1
17	17	46	1	1	1	1	1	1	1
18	18	47	1	1	1	1	1	1	1
19	19	48	1	1	1	1	1	1	1
20	20	49	1	1	1	1	1	1	1
21	21	50	1	1	1	1	1	1	1
22	22	51	1	1	1	1	1	1	1
23	23	52	1	1	1	1	1	1	1
24	24	53	1	1	1	1	1	1	1
25	25	54	1	1	1	1	1	1	1
26	26	55	1	1	1	1	1	1	1
27	27	56	1	1	1	1	1	1	1
28	28	57	1	1	1	1	1	1	1
29	29	58	1	1	1	1	1	1	1
30	30	59	1	1	1	1	1	1	1
31	31	60	1	1	1	1	1	1	1
32	32	61	1	1	1	1	1	1	1
33	33	62	1	1	1	1	1	1	1
34	34	63	1	1	1	1	1	1	1
35	35	64	1	1	1	1	1	1	1
36	36	65	1	1	1	1	1	1	1
37	37	66	1	1	1	1	1	1	1
38	38	67	1	1	1	1	1	1	1
39	39	68	1	1	1	1	1	1	1
40	40	69	1	1	1	1	1	1	1
41	41	70	1	1	1	1	1	1	1
42	42	71	1	1	1	1	1	1	1
43	43	72	1	1	1	1	1	1	1
44	44	73	1	1	1	1	1	1	1
45	45	74	1	1	1	1	1	1	1
46	46	75	1	1	1	1	1	1	1
47	47	76	1	1	1	1	1	1	1
48	48	77	1	1	1	1	1	1	1
49	49	78	1	1	1	1	1	1	1
50	50	79	1	1	1	1	1	1	1

↑  
North

Crash Diagram and Remarks

MICH. BEL  
DRIVEWAY

3

1

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100

[illegible]

- VEH 1 TRAVELING N/S ON [REDACTED], MADE A LEFT TURN FROM THE RHT THEN LAUGH, CROSSED SIX LANES. VEH 2 TRAVELING Y/S SOUTH STRUCK VEH 1 AND SPUN IT AROUND FACING EAST. VEH 3 ALSO TRAVELING S/S SOUTHPLD ALSO STRUCK VEH 1. - VEH 3 ENDED UP ROLLING OVER ON ITS SIDE AGAINST A LIGHT POLE. NO DAMAGE TO LIGHT POLE.

Authority: 1949 PA 300, Sec. 257.622  
Compliance: Required  
Penalty: \$100 and/or 90 days

Do Not Use

BEST AVAILABLE COPY

Complaint #

93- [REDACTED]

File Class

Complaint Disposition

☐ Open ☐ Closed

Reviewer

OR: MI-6375100

STATE OF MICHIGAN

Traffic Crash Report

Department Name

Crash Date

Month Day Year

Crash Time

Hour Minute

Crash Location

County

City/Town/Village

Traffic Control

1. Signal

2. Stop Sign

3. Yield Sign

4. Not Present

Location on

Name

300

Intersection

FT MI

North South

East West

Beginning of Ramp

End of Ramp

No. of Units

Crash Type

1. Single Motor Vehicle

2. Head On

3. Head On-Left Turn

4. Angle

5. Rear End

6. Rear End-Left Turn

7. Rear End-Right Turn

8. Sideswipe-Same

9. Sideswipe-Opposite

10. Other/Unknown

Special Circumstances

1. None

2. Deer

3. School Bus

4. Hit and Run

5. Fleeing Police

Special Study

1. Local

2. State

Weather

1. Clear

2. Cloudy

3. Fog/Smoke

4. Rain

5. Snow/Blowing Snow

6. Severe Wind

7. Sleet/Hail

8. Other/Unknown

Light

1. Daylight

2. Dawn

3. Dusk

4. Dark-Lighted

5. Dark-Unlighted

6. Other/Unknown

Fatal (Report All)

Corrected Copy

Replace (Entire Report)

Delete (Entire Report)

Non-Traffic Area

ORV/Snowmobile

Construction Zone

(Mark One From Each Group)

Type

1. Const/Maint.

2. Utility

Lane

0 or 1

1. Yes

2. No

Activity

1. On Road

2. Off Road

3. None

Relation to Roadway

(Location of First Impact)

1. On Road

2. Median

3. Shoulder

4. Outside of Shoulder/Curb

5. Gore

6. Other/Unknown

Area

1. Dry

2. Wet

3. Icy

4. Snowy

5. Muddy

6. Slippery

7. Debris

8. Other/Unknown

Road Condition

1. Dry

2. Wet

3. Icy

4. Snowy

5. Muddy

6. Slippery

7. Debris

8. Other/Unknown

Unit Number

State

Driver License Number

Date of Birth

License Type

Sex

First Name

Middle

Last

Position

Restraint

Ambulance/Hospital

Street Address

Phone Number

Vehicle Registration

Vehicle Direction

Special Vehicles

Vehicle Use

Unit Type

Alcohol

Test Type

Injury

Ejected

Trapped

Extent of Vehicle Damage

Drivable

Vehicle Type

Vehicle Use

Private Trailer Type

Vehicle Use

First Name

Middle

Last

Date of Birth

Sex

Ejected

Street Address

Phone Number

Vehicle Registration

Vehicle Direction

Special Vehicles

Vehicle Use

Unit Type

Alcohol

Test Type

Injury

Ejected

Trapped

Extent of Vehicle Damage

Drivable

Vehicle Type

Vehicle Use

Private Trailer Type

Vehicle Use

First Name

Middle

Last

Date of Birth

Sex

Ejected

Street Address

Phone Number

Vehicle Registration

Vehicle Direction

Special Vehicles

Vehicle Use

Unit Type

Alcohol

Test Type

Injury

Ejected

Trapped

Extent of Vehicle Damage

Drivable

Vehicle Type

Vehicle Use

Private Trailer Type

Vehicle Use

First Name

Middle

Last

Date of Birth

Sex

Ejected

Street Address

Phone Number

Vehicle Registration

Vehicle Direction

Special Vehicles

Vehicle Use

Unit Type

Alcohol

Test Type

Injury

Ejected

Trapped

Extent of Vehicle Damage

Drivable

Vehicle Type

Vehicle Use

Private Trailer Type

Vehicle Use

First Name

Middle

Last

Date of Birth

Sex

Ejected

Street Address

Phone Number

Vehicle Registration

Vehicle Direction

Special Vehicles

Vehicle Use

Unit Type

Alcohol

Test Type

Injury

Ejected

Trapped

Extent of Vehicle Damage

Drivable

Vehicle Type

Vehicle Use

Private Trailer Type

Vehicle Use

First Name

Middle

Last

Date of Birth

Sex

Ejected

Street Address

Phone Number

Vehicle Registration

Vehicle Direction

Special Vehicles

Vehicle Use

Unit Type

Alcohol

Test Type

Injury

Ejected

Trapped

Extent of Vehicle Damage

Drivable

Vehicle Type

Vehicle Use

Private Trailer Type

Vehicle Use

First Name

Middle

Last

Date of Birth

Sex

Ejected

Street Address

Phone Number

Vehicle Registration

Vehicle Direction

Special Vehicles

Vehicle Use

Unit Type

Alcohol

Test Type

Injury

Ejected

Trapped

Extent of Vehicle Damage

Drivable

Vehicle Type

Vehicle Use

Private Trailer Type

Vehicle Use

First Name

Middle

Last

Date of Birth

Sex

Ejected

Street Address

Phone Number

Vehicle Registration

Vehicle Direction

Special Vehicles

Vehicle Use

Unit Type

Alcohol

Test Type

Injury

Ejected

Trapped



Unit Number	Date of Birth			License Type	Sex	Height	Weight
	Month	Day	Year	O CY C F M R	M F		
1	First Name			Middle		Last	
2	Street Address			Phone Number			
3	City	State	Zip	Vehicle Description			
4	Alcohol			Test Type	Breath	Test Results	Citation issued
5	HBO			Field	Urine	Refused	1. Hazardous 2. Other
6	Yes No			PBT	Blood	Not Offended	
7	Vehicle Registration			State	VIN	Vehicle Use	
8	Insured			Towed To/By	Vehicle Direction	Special Vehicles	
9	Greatest Damage			Vehicle Type	Vehicle Use	Vehicle Defect	
10	0 1 2 3 4 5 6 7 8 9 10 11 12			PA VA PU BT	CY MO GC SM	Private Trailer Type	
11	1st Damage			Extent of Vehicle Damage	Drivesable	1 2 3 4 5 6 7	
12	0 1 2 3 4 5 6 7			Yes No			
Injured			First Name		Middle	Last	Date of Birth
Street Address			City		State	Zip	Month Day Year
Phone Number			Sex		Height	Weight	Trapped
Airbag Deployed			1. Yes 2. No 3. Not Available				
Injured			First Name		Middle	Last	Date of Birth
Street Address			City		State	Zip	Month Day Year
Phone Number			Sex		Height	Weight	Trapped
Airbag Deployed			1. Yes 2. No 3. Not Available				
Witness			Owner Name		Address	Phone Number	Age Sex Race
Uninjured Passenger			Owner Name		Address	Phone Number	Age Sex Race
Uninjured Passenger			Owner Name		Address	Phone Number	Age Sex Race

Unit Reported on Front					Unit Reported Above				
Action Prior	First	Second	Third	Fourth	Action Prior	First	Second	Third	Fourth
1	2	3	4	5	1	2	3	4	5
6	7	8	9	10	6	7	8	9	10
11	12	13	14	15	11	12	13	14	15
16	17	18	19	20	16	17	18	19	20
21	22	23	24	25	21	22	23	24	25
26	27	28	29	30	26	27	28	29	30
31	32	33	34	35	31	32	33	34	35
36	37	38	39	40	36	37	38	39	40
41	42	43	44	45	41	42	43	44	45
46	47	48	49	50	46	47	48	49	50
51	52	53	54	55	51	52	53	54	55
56	57	58	59	60	56	57	58	59	60
61	62	63	64	65	61	62	63	64	65
66	67	68	69	70	66	67	68	69	70
71	72	73	74	75	71	72	73	74	75
76	77	78	79	80	76	77	78	79	80
81	82	83	84	85	81	82	83	84	85
86	87	88	89	90	86	87	88	89	90
91	92	93	94	95	91	92	93	94	95
96	97	98	99	100	96	97	98	99	100
101	102	103	104	105	101	102	103	104	105
106	107	108	109	110	106	107	108	109	110
111	112	113	114	115	111	112	113	114	115
116	117	118	119	120	116	117	118	119	120
121	122	123	124	125	121	122	123	124	125
126	127	128	129	130	126	127	128	129	130
131	132	133	134	135	131	132	133	134	135
136	137	138	139	140	136	137	138	139	140
141	142	143	144	145	141	142	143	144	145
146	147	148	149	150	146	147	148	149	150
151	152	153	154	155	151	152	153	154	155
156	157	158	159	160	156	157	158	159	160
161	162	163	164	165	161	162	163	164	165
166	167	168	169	170	166	167	168	169	170
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221	222	223	224	225	221	222	223	224	225
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256	257	258	259	260	256	257	258	259	260
261	262	263	264	265	261	262	263	264	265
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281	282	283	284	285	281	282	283	284	285
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306	307	308	309	310	306	307	308	309	310
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361	362	363	364	365	361	362	363	364	365
366	367	368	369	370	366	367	368	369	370
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436	437	438	439	440	436	437	438	439	440
441	442	443	444	445	441	442	443	444	445
446	447	448	449	450	446	447	448	449	450
451	452	453	454	455	451	452	453	454	455
456	457	458	459	460	456	457	458	459	460
461	462	463	464	465	461	462	463	464	465
466	467	468	469	470	466	467	468	469	470
471	472	473	474	475	471	472	473	474	475
476	477	478	479	480	476	477	478	479	480
481	482	483	484	485	481	482	483	484	485
486	487	488	489	490	486	487	488	489	490
491	492	493	494	495	491	492	493	494	495
496	497	498	499	500	496	497	498	499	500
501	502	503	504	505	501	502	503	504	505
506	507	508	509	510	506	507	508	509	510
511	512	513	514	515	511	512	513	514	515
516	517	518	519	520	516	517	518	519	520
521	522	523	524	525	521	522	523	524	525
526	527	528	529	530	526	527	528	529	530
531	532	533	534	535	531	532	533	534	535
536	537	538	539	540	536	537	538	539	540
541	542	543	544	545	541	542	543	544	545
546	547	548	549	550	546	547	548	549	550
551	552	553	554	555	551	552	553	554	555
556	557	558	559	560	556	557	558	559	560
561	562	563	564	565	561	562	563	564	565



## APPENDIX B



## CASE SUMMARY

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

PSU NCSI CASE NO. 93-04 TYPE OF ACCIDENT Three Vehicle; angle, angle, roll

## A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES

(Provide a summary of the accident sequence as well as any particular event of the accident that is noteworthy. Injury mechanism and vehicle crashworthiness is the focus, not driver culpability. Do not include any personal identifiers.)

V1 was travelling SB in #3 lane of a 7 lane arterial. V2 was also travelling SB but in the #1 lane. V3 was travelling NB in the #1 lane. V3, for unknown reasons made a left turn across all lanes and was struck on the right rear by the front of V1. V3 then rotated in a CW manner approximately 80 degrees and was struck on the left side by the front of V2. V2 and V3 snagged while rotating CCW. Upon separation, V2 tripped on its right wheels and rolled one quarter turn and impacted a luminaire pole with its top

V1 was equipped with both driver and passenger supplemental air bags. Both air bags deployed as a result of the frontal impact with V3.

V2 was equipped with a driver air bag which also deployed as a result of its impact with V3.

V2s impact with the luminaire pole was minor and caused no damage to the pole.

## B. VEHICLE PROFILE(S)

Vehicle No.	Class of Vehicle	Year/Make/Model	Most Severe Damage Based on Vehicle Inspection		Component Failure
			Damage Plane	Severity Description	
1	Full size	1993 Dodge Intrepid	F	Moderate	None
2	Subcompact	1992 Ply. Sundance	F & L	Moderate	None
3	Subcompact	1986 Buick Century	L & R	Moderate	None

DO NOT SANITIZE THIS FORM

## ACCIDENT COLLISION MEASUREMENT TABLE

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

Primary Sampling Unit Number *NC51*

Case Number—Stratum 9 3 0 4

ACCIDENT COLLISION DIAGRAM				CRASH DATA			
LEVEL I PHYSICAL EVIDENCE ABSENT		LEVEL II (Cont'd) physical evidence is present:		VEH. #1	VEH. #2	VEH. #3	
To be accomplished when there is no physical evidence present at the scene:		<ul style="list-style-type: none"> <li>* document reference point and reference line relative to physical features present at the scene</li> <li>* scale documentation of all accident induced physical evidence</li> <li>* scaled documentation of all roadside objects contacted</li> <li>* roadway surface type and condition of applicable roadways</li> <li>* grade measurements for all applicable roadways and at location of rollover initiation</li> <li>* scaled representations of the vehicle(s) at pre-impact, impact, and final rest based upon either:               <ul style="list-style-type: none"> <li>a) physical evidence, or</li> <li>b) reconstructed accident dynamics</li> </ul> </li> </ul>		Heading Angle	<u>00</u>	<u>00</u>	<u>104</u> <u>194</u>
<ul style="list-style-type: none"> <li>* approximate vehicle orientation at impact and final rest</li> <li>* applicable road/roadway delineation (e.g., curbs/edge lines, lane markings, median markings, pavement markings, etc.)</li> <li>* applicable traffic controls (e.g., speed limit)</li> <li>* north arrow placed on diagram</li> <li>* sketch required</li> </ul>				Surface Type	<u>bit</u>	<u>bit</u>	<u>bit</u>
				Surface Condition	<u>well</u> <u>worn</u>	<u>well</u> <u>worn</u>	<u>well</u> <u>worn</u>
				Grade (v/h) Measurement (between impact and final rest)	<u>level</u>	<u>level</u>	<u>level</u>
LEVEL II PHYSICAL EVIDENCE PRESENT				Grade (v/h) Measurement (at location of rollover initiation)	<u>      </u>	<u>level</u>	<u>      </u>
In addition to the level I tasks noted above, the following must be accomplished when							

Reference Point: NW geometric corner  
of [redacted] and [redacted]

Reference line: W edge of [REDACTED]

[illegible]

Gravel  
Shoulder



No Left Turn →

All legs  
measure level

S. e 1:250

All measurements  
in meters

3.5

3.6

3.6

3.6

4.0

3.6

3.7

4.0

3.5

Bituminous Surface  
Well Worn

Bituminous  
Shoulder

Concrete Merge  
Lane

Concrete  
Surface

Rd.

Meters

RL





# ACCIDENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

NCSI

2. Case Number - Stratum

9304

## IDENTIFICATION

3. Number of General Vehicle  
Forms Submitted

03

4. Date of Accident  
(Month, Day, Year)

           / 9 / 3

5. Time of Accident

Code reported military time of accident.

NOTE: Midnight = 2400  
Unknown = 9999

## SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS14-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. SS14 Fatal AOPS 0

7. SS15 Administrative Use 0

8. SS16 0

9. SS17 0

10. SS18 0

## NUMBER OF EVENTS

11. Number of Recorded Events  
in This Accident

04

Code the number of events which occurred  
in this accident.

## ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object on the right.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>0 1</u>	13. <u>01</u>	14. <u>04</u>	15. <u>F</u>	16. <u>03</u>	17. <u>03</u>	18. <u>R</u>
19. <u>0 2</u>	20. <u>02</u>	21. <u>01</u>	22. <u>F</u>	23. <u>03</u>	24. <u>03</u>	25. <u>L</u>
26. <u>0 3</u>	27. <u>02</u>	28. <u>01</u>	29. <u>R</u>	30. <u>31</u>	31. <u>00</u>	32. <u>0</u>
33. <u>0 4</u>	34. <u>02</u>	35. <u>01</u>	36. <u>F</u>	37. <u>45</u>	38. <u>00</u>	39. <u>0</u>
40. <u>0 5</u>	41. <u>01</u>	42. <u>    </u>	43. <u>I</u>	44. <u>    </u>	45. <u>    </u>	46. <u>    </u>

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

## CODES FOR CLASS OF VEHICLE

- (00) Not a motor vehicle
- (01) Subcompact/mini (wheelbase < 254 cm)
- (02) Compact (wheelbase ≥ 254 but < 265 cm)
- (03) Intermediate (wheelbase ≥ 265 but < 278 cm)
- (04) Full size (wheelbase ≥ 278 but < 291 cm)
- (05) Largest (wheelbase ≥ 291 cm)
- (09) Unknown passenger car size
- (11) Compact utility vehicle
- (12) Large utility vehicle (≤ 4,500 kgs GVWR)
- (13) Passenger van (≤ 4,500 kgs GVWR)
- (14) Other van (≤ 4,500 kgs GVWR)
- (15) Pickup truck (≤ 4,500 kgs GVWR)
- (18) Other truck (≤ 4,500 kgs GVWR)
- (19) Unknown light truck type
- (20) School bus
- (21) Other bus
- (22) Truck (> 4,500 kgs GVWR)
- (23) Tractor without trailer
- (24) Tractor-trailer(s)
- (25) Motored cycle
- (28) Other vehicle
- (99) Unknown

## CODES FOR GENERAL AREA OF DAMAGE (GAD)

### CDS APPLICABLE AND OTHER VEHICLES

### TDC APPLICABLE VEHICLES

- |                         |  |
|-------------------------|--|
| (O) Not a motor vehicle | (O) Not a motor vehicle  |
| (N) Noncollision        | (N) Noncollision   |
| (F) Front               | (F) Front  |
| (R) Right side          | (R) Right side   |
| (L) Left side           | (L) Left side  |
| (B) Back                | (B) Back of unit with cargo area (rear of trailer or straight truck) |
| (T) Top                 | (D) Back (rear of tractor)   |
| (U) Undercarriage       | (C) Rear of cab  |
| (9) Unknown             | (V) Front of cargo area  |
|                         | (T) Top  |
|                         | (U) Undercarriage  |
|                         | (9) Unknown  |

## CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

### (01-30) — Vehicle Number

#### Noncollision

- (31) Overturn — rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify):

(35) Noncollision injury

(38) Other noncollision (specify):

(39) Noncollision — details unknown

#### Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

(45) Breakaway pole or post (any diameter)

#### Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail)  
(specify):

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify):

(69) Unknown fixed object

#### Collision with Nonfixed Object

(71) Motor vehicle not in-transport

(72) Pedestrian

(73) Cyclist or cycle

(74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) Animal

(77) Train

(78) Trailer, disconnected in transport

(88) Other nonfixed object (specify):

(89) Unknown nonfixed object

(98) Other event (specify):

(99) Unknown event or object



## ACCIDENT LOG

### TO BE COMPLETED BY TEAM

1. PSU Number NCSI
2. Case Number—Stratum 9304
3. Assigned Researcher Number [REDACTED]
4. PSU Reviewer Number [REDACTED]
5. Sample Date *Notified* [REDACTED] 19 3
6. Date Scene Field Work Completed [REDACTED] 19 3

### TO BE COMPLETED BY ZONE CENTER

7. Type of Scene Inspection         
(1) No physical evidence  
(2) Drive by (photos only)  
(3) Physical evidence present
8. Field Documentation Of Physical Plant         
(0) Not applicable  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
9. Field Documentation Of Physical Evidence         
(0) Not applicable  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
10. Quality Of Scene Diagram         
(0) Not applicable  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
11. Number of Scene Slides
12. Scene Slides Subject Quality         
(0) Not applicable  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
13. Scene Slides Quality         
(0) Not applicable  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
14. Number Of Researcher Coded Events
15. Number Of Events Added By Zone Center
16. Number Of Events Deleted By Zone Center
17. Correct Stratum Character
18. Stratum Checked By (Initials)

### DATA STATUS OF VARIABLE NUMBERS 1-81

1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18				
19	20	21	22	23	24	25				
26	27	28	29	30	31	32				
33	34	35	36	37	38	39				
40	41	42	43	44	45	46				
47	48	49	50	51	52	53				
54	55	56	57	58	59	60				
61	62	63	64	65	66	67				
68	69	70	71	72	73	74				
75	76	77	78	79	80	81				

#### Data Status Codes:

- (Blank) Correct  
(1) Derived error  
(2) Non-correctable error  
(3) Correctable error  
(4) Change—no error  
(5) Sequencing error  
(7) Incorrect edit override  
(8) MDE error  
(9) Unknown coded



## GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number NC 51  
2. Case Number - Stratum 9304  
3. Vehicle Number 01

### VEHICLE IDENTIFICATION

4. Vehicle Model Year 93  
Code the last two digits of the model year  
(99) Unknown

5. Vehicle Make (specify): Dodge 07  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

6. Vehicle Model (specify): Intrepid 041  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown

Body Type 04  
Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number  
2B3ED56 [REDACTED]

Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros  
Unknown—Code all nine's

### OFFICIAL RECORDS

9. Police Reported Vehicle Disposition 1  
(0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

10. Police Reported Travel Speed 999

Code to the nearest kph (NOTE: 000 means  
less than 0.5 kph)  
(160) 159.5 kph and above  
(999) Unknown

\_\_\_\_ mph X 1.6093 = \_\_\_\_ kph

11. Police Reported Alcohol Presence 0  
(0) No alcohol present  
(1) Yes (alcohol present)  
(7) Not reported  
(8) No driver present  
(9) Unknown

Note: See variables 37 through 55  
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver 96  
Code actual value (decimal implied  
before first digit—0.xx)  
(95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

Source: PAR

### ACCIDENT RELATED

13. Speed Limit 072  
(000) No statutory limit  
Code posted or statutory speed limit  
in kph  
(999) Unknown

45 mph X 1.6093 = 72.4185 kph

14. Attempted Avoidance Maneuver 02  
(00) No impact  
(01) No avoidance actions  
(02) Braking (no lockup)  
(03) Braking (lockup)  
(04) Braking (lockup unknown)  
(05) Releasing brakes  
(06) Steering left  
(07) Steering right  
(08) Braking and steering left  
(09) Braking and steering right  
(10) Accelerating  
(11) Accelerating and steering left  
(12) Accelerating and steering right  
(97) No driver present  
(98) Other action (specify):  
(99) Unknown

15. Accident Type 69  
Applicable codes may be found on the  
back of page two of this field form  
(00) No impact  
Code the number of the diagram that  
best describes the accident circumstance  
(98) Other accident type (specify):  
(99) Unknown

\*\*\*\* SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 \*\*\*\*



## 24. Rollover

- (0) Driver not present  
(1) Driver present  
(9) Unknown

- 04

04

## **OVERRIDE/UNDERRIDE (THIS VEHICLE)**

- 1.460

(045) Less than 450 kilograms  
(610) 6,100 kilograms or more  
(999) Unknown

3,217 lbs X .4536 = 1,459 kgs

Source: [REDACTED]

- 0.0000

(000) Less than 5 kilograms  
(450) 4,500 kilograms or more  
(999) Unknown

\_\_\_\_\_, \_\_\_\_ lbs X .4536 = \_\_\_\_\_, \_\_\_\_\_ kgs

- 0

- 

(0) No override/underride, or not an end-to-end impact

**Override (see specific CDC)**

- (1) 1st CDC  
(2) 2nd CDC  
(3) Other not automated CDC (specify):

***Underride (see specific CDC)***

- (4) 1st CDC  
(5) 2nd CDC  
(6) Other not automated CDC (specify):

- (7) Medium/heavy truck or bus override  
(9) Unknown

### HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

- 0

(0) No towed unit  
(1) Yes—towed trailing unit  
(9) Unknown

- 0

(0) No  
(1) Yes

- 0

- (0) Not collision (for highest delta V) with tree or pole
- (1) Not damaged
- (2) Cracked/sheared
- (3) Tilted  $< 45$  degrees
- (4) Tilted  $\geq 45$  degrees
- (5) Uprooted tree
- (6) Separated pole from base
- (7) Pole replaced
- (8) Other (specify):

(9) Unknown

**Values: (000)-(359) Code actual value**  
**(997) Noncollision**  
**(998) Impact with object**  
**(999) Unknown**

- ○ ○

- 106

29. Basis for Total Delta V (highest)

6*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

*Delta V Not Calculated*

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

## COMPUTER GENERATED DELTA V

Secondary Highest

30. Total Delta V

9 9 9

\_\_\_\_ Nearest kph

(NOTE: 000 means less than  
0.5 kph)  
(160) 159.5 kph and above  
(999) Unknown

31. Longitudinal Component of  
Delta V+ 9 9 9  
- \_\_\_\_\_

\_\_\_\_ Nearest kph

(NOTE: \_\_000 means greater than  
-0.5 kph and less than +0.5 kph)  
(±160) ±159.5 kph and above  
(\_\_999) Unknown

Secondary

Highest

32. Lateral Component of Delta V

+ 9 9 9  
- \_\_\_\_\_

\_\_\_\_ Nearest kph

(NOTE: \_\_000 means greater than  
-0.5 kph and less than +0.5 kph)  
(±160) ±159.5 kph and above  
(\_\_999) Unknown

33. Energy Absorption

9 9 9 . 9 00

\_\_\_\_ Nearest 100 joules

(NOTE: 0000 means less than 50 joules)  
(9997) 999,650 joules or more  
(9999) Unknown

34. Confidence In Reconstruction Program  
Results (For Highest Delta V)0

- (0) No reconstruction
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

35. Type of Vehicle Inspection

2

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify):

partially repaired  
No CDC documentation

36. Is this an AOPS Vehicle?

1

- (0) No
- (1) Yes - researcher determined
- (2) VIN determined air bag system
- (3) VIN determined automatic (passive) belts
- (4) VIN determined air bag and automatic (passive) belts

IS OLDMISS APPLICABLE FOR THIS VEHICLE? ☐ YES ☒ NOIF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? ☐ YES ☒ NO

37. Police Reported Other Drug Presence 7

- (0) No other drugs present  
 (1) Yes (other drug present)  
 (7) Not reported  
 (8) No driver present  
 (9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver 0

- (0) No DEC process available or given  
 (1) DEC process given, results known  
 (2) DEC process given, results unknown  
 (3) DEC process available, unknown if given  
 (8) No driver present

39. Other Drug Specimen Test Type For Driver 0

- (0) No specimen test given  
 (1) Blood test  
 (2) Urine test  
 (3) Other specimen tests (specify):  
 \_\_\_\_\_  
 (7) Unspecified specimen test  
 (8) No driver present  
 (9) Unknown if specimen test given

### DRUG EVALUATION CLASSIFICATION

#### OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>0</u>	41. <u>0</u>
Depressant Drug	42. <u>0</u>	43. <u>0</u>
Stimulant Drug	44. <u>0</u>	45. <u>0</u>
Hallucinogen Drug	46. <u>0</u>	47. <u>0</u>
Cannabinoid Drug	48. <u>0</u>	49. <u>0</u>
Phencyclidine (PCP)	50. <u>0</u>	51. <u>0</u>
Inhalant Drug	52. <u>0</u>	53. <u>0</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>0</u>	55. <u>0</u>

## Codes For DEC Test Results

- (0) No DEC test given  
 (1) Passed DEC test  
 (2) Failed DEC test  
 (3) DEC test given—results unknown  
 (8) No driver present  
 (9) Unknown if DEC test given

## Codes for Specimen Test Results

- (0) No specimen test given  
 (1) Drug not found in specimen  
 (2) Drug found in specimen  
 (7) Specimen test given, results unknown or  
 not obtained  
 (8) No driver present  
 (9) Unknown if specimen test given

**OTHER DATA**

## 56. Driver's Zip Code

- (00000) Driver not present  
(00001) Driver not a resident of U.S. or territories  
Code actual 5-digit zip code  
(99999) Unknown

## 57. Driver's Race/Ethnic Origin

- (0) Driver not present  
(1) White (non-Hispanic)  
(2) Black (non-Hispanic)  
(3) White (Hispanic)  
(4) Black (Hispanic)  
(5) American Indian, Eskimo or Aleut  
(6) Asian or Pacific Islander  
(8) Other (specify):  
(9) Unknown

## 58. Vehicle Special Use (This Trip)

- (0) No special use  
(1) Taxi  
(2) Vehicle used as school bus  
(3) Vehicle used as other bus  
(4) Military  
(5) Police  
(6) Ambulance  
(7) Fire truck or car  
(8) Other (specify):  
(9) Unknown

**ROLLOVER DATA**

If GV07 (Body Type)  $\neq$  1-49, leave GV59-GV63 blank.  
If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
If GV24 = 9, then GV59-GV63 must equal 9.

## 59. Rollover Initiation Type

- (0) No rollover  
(1) Trip-over  
(2) Flip-over  
(3) Turn-over  
(4) Climb-over  
(5) Fall-over  
(6) Bounce-over  
(7) Collision with another vehicle  
(8) Other rollover initiation type specify):  
(9) Unknown rollover initiation type

## 60. Location of Rollover Initiation

- (0) No rollover  
(1) On roadway  
(2) On shoulder—paved  
(3) On shoulder—unpaved  
(4) On roadside or divided trafficway median  
(9) Unknown

## 61. Rollover Initiation Object Contacted

## 62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover  
(1) Wheels/tires  
(2) Side plane  
(3) End plane  
(4) Undercarriage  
(5) Other location on vehicle (specify):  
(8) Non-contact rollover forces (specify):  
(9) Unknown

## 63. Direction of Initial Roll

- (0) No rollover  
(1) Roll right - primarily about the longitudinal axis  
(2) Roll left - primarily about the longitudinal axis  
(5) End-over-end (i.e., primarily about the lateral axis)  
(9) Unknown roll direction

**PRECRASH DATA**

## 64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight  
(02) Slowing or stopping in traffic lane  
(03) Starting in traffic lane  
(04) Stopped in traffic lane  
(05) Passing or overtaking another vehicle  
(06) Disabled or parked in travel lane  
(07) Leaving a parking position  
(08) Entering a parking position  
(09) Turning right  
(10) Turning left  
(11) Making a U-turn  
(12) Backing up (other than for parking position)  
(13) Negotiating a curve  
(14) Changing lanes  
(15) Merging  
(16) Successful avoidance maneuver to a previous critical event  
(97) Other (specify):  
(98) No driver present  
(99) Unknown

## PRECRASH DATA (Continued)

65. Critical Precrash Event 62*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): \_\_\_\_\_
- (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

*Pedestrian or Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian - unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): \_\_\_\_\_
- (99) Unknown

For Corrective Actions Attempted see variable GV14  
(Attempted Avoidance Maneuver)

66. Precrash Stability After Avoidance Maneuver 1

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): \_\_\_\_\_
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action) 1

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), \*\*\*  
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*  
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

**GENERAL VEHICLE LOG**

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

TO BE COMPLETED BY TEAM	TO BE COMPLETED BY THE ZONE CENTER																																																																																																																																																					
<p>1. PSU Number <u>NCST</u></p> <p>2. Case Number—Stratum <u>9304</u></p> <p>3. Researcher Completing Form <u>[Signature]</u></p> <p>4. Vehicle Number <u>01</u></p> <p>5. Vehicle Disposition/Type <u>1</u></p> <p>(1) Towed, CDS applicable (2) Non-towed, CDS applicable (not AOPS) (3) Non-CDS applicable (4) Non-towed AOPS—CDS applicable</p> <p>6. Reason Vehicle Inspection Not Completed <u>02</u></p> <p>(00) Non-CDS applicable vehicle (01) Complete inspection (02) Partial inspection — under repair (03) Partial inspection — repair (04) Partial inspection — other (specify): _____</p> <p>(05) Vehicle cannot be located (06) Vehicle destroyed (07) Vehicle outside of study area (08) Vehicle impounded (09) Vehicle sold (10) Hit and run vehicle (11) Owner could not be located (12) Owner refusal (13) Insurance company refusal (14) Attorney refusal or litigation (15) Repair or tow facility refusal (16) Stolen (17) Wrong name and address on PAR (18) Caseload / staff turnover (19) Other (specify): _____</p> <p>7. Knowledge Of Highest Delta V Results <u>12</u></p> <p><i>Known</i> (01) CRASH-PC damage only (02) CRASH-PC damage and trajectory (03) OLDMISS (completed by Zone Center)</p> <p><i>Unknown</i> (04) Rollover (05) Other non-horizontal force (06) Sideswipe type damage / severe override (07) Vehicle out of scope / pedestrian (08) Yielding object (09) Overlapping damage (10) Insufficient data (11) Other (specify): _____ (12) OLDMISS form - pending review by Zone Center</p> <p>8. Presence Of Non-coded Reconstruction Program? <u>0</u></p> <p>(0) No (1) Yes</p> <p>9. Data Obtained for This Vehicle's Most Severe Impact (Regardless of Usage) <u>0</u></p> <p>(0) No data obtained (1) CDC data only (2) Trajectory data only (3) CDC and crush profile only (4) CDC and trajectory data only (5) CDC, crush profile, and trajectory data</p>	<p>10. Reconstruction Program (Most Severe Impact) _____</p> <p>(0) Not present (1) Added (2) Dropped (3) Changed (4) Correct</p> <p>11. Reason(s) Program Results Dropped Or Changed</p> <p>a. Algorithm choice b. Collision type c. Vehicle type d. Size / stiffness / weight e. Improved PDOF f. CDC g. Trajectory data h. Damage data i. Heading angle for Oldmiss</p> <table style="width: 100%; text-align: center;"><tr><td>a</td><td>b</td><td>c</td><td>d</td><td>e</td><td>f</td><td>g</td><td>h</td><td>i</td></tr><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr></table> <p>(Blank) Correct or no reconstruction (1) Incorrect</p> <p style="text-align: center;"><b>DATA STATUS OF VARIABLE NUMBERS 3-67</b></p> <table style="width: 100%; text-align: center;"><tr><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td></tr><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input 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## EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

Administration	Statewide Wildlife Survey
1. Primary Sampling Unit Number	<u>NC51</u>
2. Case Number - Stratum	<u>9304</u>
3. Vehicle Number	<u>04</u>

## VEHICLE IDENTIFICATION

VIN 2B3ED56T [REDACTED] Model Year 93  
Vehicle Make (specify): Dodge Vehicle Model (specify): Intrepid

## LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	Front	Unknown - Veh. Repaired
		Old Parts Not Available

### CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

**Measure and document on the vehicle diagram the location of maximum crush.**

**Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.**

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

[illegible]

## Parts replaced per Body Shop

- Bumper/Nose Cone Core Support
- Hood
- RF Fender
- LF Fender
- Radiator
- P/S Pulley
- A/C Pulley
- Grille
- RF Frame Rail
- Windshield

## Items Verified by Body Shop

- windshield suffered stress fx only
  - no interior object contact
  - no starring
- no wheel / tire damage
- no steering damage
- no door damage / no hinge damage



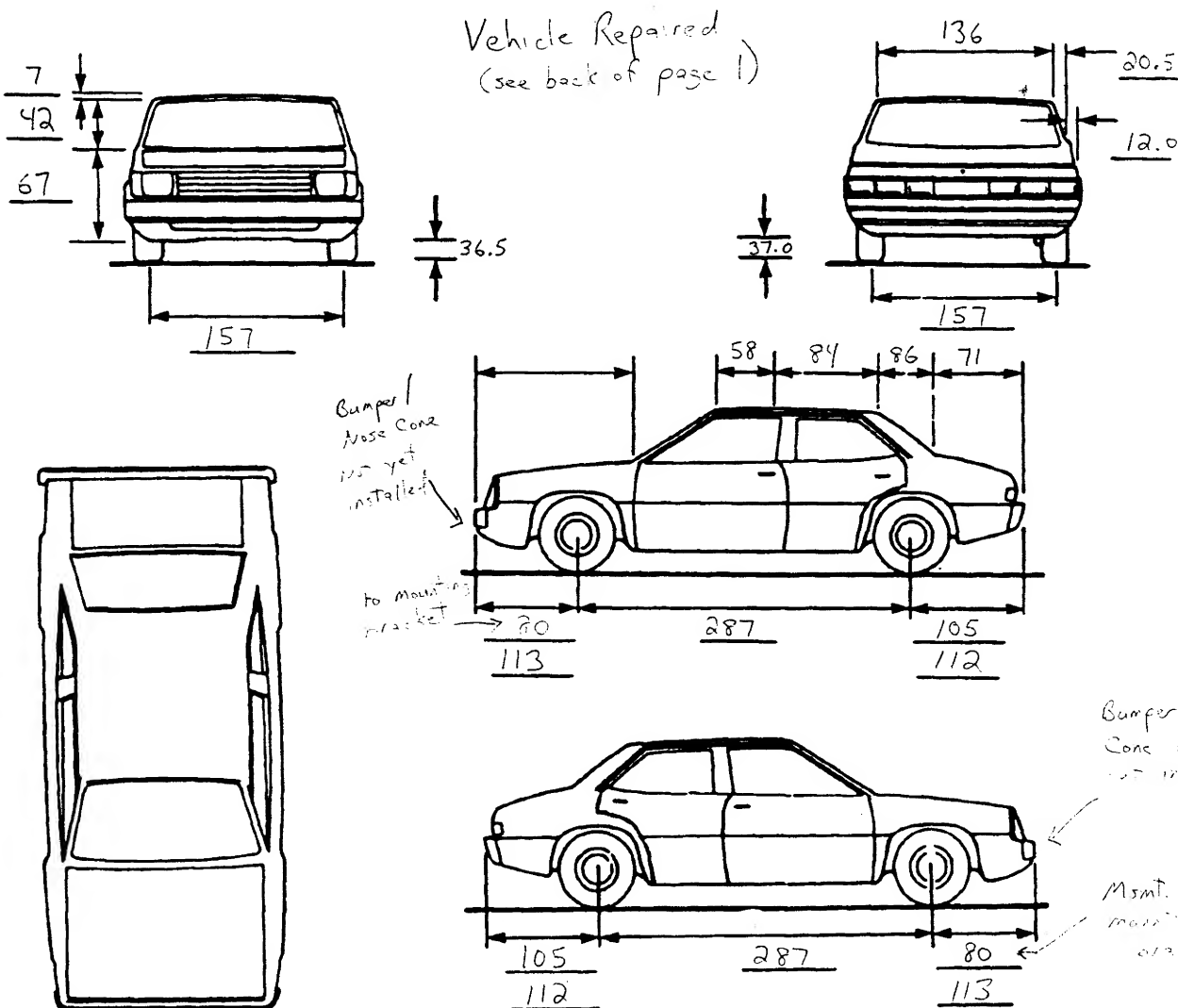
# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>1</u> <u>1</u> <u>3</u> . <u>0</u>	inches	x 2.54	=	<u>2</u> <u>8</u> <u>7</u>	cm
Overall Length	<u>2</u> <u>0</u> <u>1</u> . <u>7</u>	inches	x 2.54	=	<u>5</u> <u>1</u> <u>2</u>	cm
Maximum Width	<u>7</u> <u>4</u> . <u>4</u>	inches	x 2.54	=	<u>1</u> <u>8</u> <u>9</u>	cm
Curb Weight	<u>3</u> , <u>2</u> <u>1</u> <u>7</u>	pounds	x .4536	=	<u>1</u> , <u>4</u> <u>5</u> <u>9</u>	kg
Average Track	<u>6</u> <u>2</u> . <u>0</u>	inches	x 2.54	=	<u>1</u> <u>5</u> <u>7</u>	cm
Front Overhang	<u>      </u> . <u>      </u>	inches	x 2.54	=	<u>      </u> . <u>      </u>	cm
Rear Overhang	<u>      </u> . <u>      </u>	inches	x 2.54	=	<u>      </u> . <u>      </u>	cm
Undeformed End Width	<u>      </u> . <u>      </u>	inches	x 2.54	=	<u>      </u> . <u>      </u>	cm
Engine Size: cyl./displ.	<u>      </u> . <u>      </u>	cc	x .001	=	<u>      </u> . <u>      </u>	L
V-6	<u>      </u> . <u>      </u>	CID	x .0164	=	<u>3</u> . <u>3</u>	L

## VEHICLE DAMAGE SKETCH

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		b. Tire deflated <i>per body shop</i> RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u>		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>287</u> cm Overall Length <u>512</u> cm Maximum Width <u>189</u> cm Curb Weight <u>1459</u> kg Average Track <u>157</u> cm Front Overhang <u>113</u> cm Rear Overhang <u>112</u> cm Undeformed End Width <u>unk.</u> cm Engine Size: cyl./displ. <u>V-6 3.3</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF $\pm$ <u>    </u> ° LF $\pm$ <u>    </u> ° RR $\pm$ <u>    </u> ° LR $\pm$ <u>    </u> ° Within $\pm$ 5 degrees	
<b>TYPE OF TRANSMISSION</b> <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic				<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD			
				Approximate Cargo Weight <u>Ø</u> kg			

## MEASUREMENTS IN CENTIMETERS



**NOTES:** Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CODES FOR OBJECT CONTACTED

## DEFORMATION CLASSIFICATION BY EVENT NUMBER

[illegible]

## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>03</u>	6. <u>99</u>	7. <u>9</u>	8. <u>9</u>	9. <u>9</u>	10. <u>9</u>	11. <u>99</u>

## Second Highest Delta "V"

12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____
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## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>± D</u>
							+
							-

## Second Highest Delta "V"

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>± D</u>
							+
							-

26. Are CDCs Documented but Not Coded on The Automated File? 0  
 (0) No  
 (1) Yes

27. Researcher's Assessment of Vehicle Disposition 1  
 (0) Not towed due to vehicle damage  
 (1) Towed due to vehicle damage  
 (9) Unknown

28. Original Wheelbase 287  
 Code to the nearest centimeter  
 (999) Unknown

113 . 0 inches X 2.54 = 287 centimeters

29. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

0

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

\_\_\_\_\_  
(Include photograph of CERTIFICATION  
PLACARD in case report)

(9) Unknown if vehicle is modified

30. Fire Occurrence

0

(0) No fire

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

31. Origin of Fire

0

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

(9) Unknown

32. Type of Fuel Tank

2

- (0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS \*\*\*  
(I.E., GV09 = 0 OR 9 AND GV36 = 0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



## EXTERIOR VEHICLE LOG

### TO BE COMPLETED BY TEAM

1. PSU Number NCST
2. Case Number—Stratum 9304
3. Researcher Completing Form [Redacted]
4. Vehicle Number 01
5. Date Vehicle Inspected [Redacted] / [Redacted] / 93

13. Number of Coded CDCs (0,1,2) \_\_\_\_\_
14. Number of Coded Crush Profiles (0,1,2) \_\_\_\_\_

### TO BE COMPLETED BY ZONE CENTER

6. Applicable Precrash Measurements \_\_\_\_\_  
(0) Not applicable  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
7. Impact Damage Documentation \_\_\_\_\_  
(0) Not applicable  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
8. Quality Of Vehicle Damage Sketch \_\_\_\_\_  
(0) Not applicable (e.g., repaired vehicle)  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
9. Number of Exterior Vehicle Slides \_\_\_\_\_
10. Exterior Slides Subject Quality \_\_\_\_\_  
(0) Not applicable  
(1) Substandard  
(2) Standard
11. Exterior Slides Quality \_\_\_\_\_  
(0) Not applicable  
(1) Substandard  
(2) Standard
12. Primary Error Source (Vehicle Plane) \_\_\_\_\_  
(0) No error  
(1) Front  
(2) Side (left or right)  
(3) Back (rear)  
(4) Top  
(5) Undercarriage  
(8) Other (specify): \_\_\_\_\_

### DATA STATUS OF VARIABLE NUMBERS 4-32

#### Highest CDC

4 5 6 7 8 9 10 11

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#### Secondary CDC

12 13 14 15 16 17 18 19

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#### Highest Crush Profile

20 21 22

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#### Secondary Crush Profile

23 24 25

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26 27 28 29 30 31 32

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#### Data Status Codes:

- (Blank) Correct  
(1) Derived error  
(2) Non-correctable error  
(3) Correctable error  
(4) Change—no error  
(5) Sequencing error  
(7) Incorrect edit override  
(8) MDE error  
(9) Unknown coded

IF THIS VEHICLE WAS NOT TOWED (I.E., GV09 ≠ 1), DO NOT COMPLETE THE  
INTERIOR VEHICLE LOG



U.S. Department of Transportation

National Highway Traffic Safety  
Administration

## INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

NCST

2. Case Number - Stratum

9304

3. Vehicle Number

01

### INTEGRITY

4. Passenger Compartment Integrity

00

(00) No integrity loss

Yes, Integrity Was Lost Through

- (01) Windshield
- (02) Door (side)
- (03) Door/hatch (back door)
- (04) Roof
- (05) Roof glass
- (06) Side window
- (07) Rear window (backlight)
- (08) Roof and roof glass
- (09) Windshield and door (side)
- (10) Windshield and roof
- (11) Side and rear window (side window and backlight)
- (12) Windshield and side window
- (13) Door and side window
- (98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 1 8. RR 1 9. TG/H 0

- (0) No door/gate/hatch
- (1) Door/gate/hatch remained closed and operational
- (2) Door/gate/hatch came open during collision
- (3) Door/gate/hatch jammed shut
- (8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09  $\neq$  2, Then code 0

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

- (1) Door operational (no damage)
- (2) Latch/striker failure due to damage
- (3) Hinge failure due to damage
- (4) Door structure failure due to damage
- (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
- (6) Latch/striker and hinge failure due to damage
- (8) Other failure (specify):

(9) Unknown

### GLAZING

Glazing Damage from Impact Forces

15. WS 2 16. LF 0 17. RF 0 18. LR 0 19. RR 0

20. BL 0 21. Roof 8 22. Other 8

- (0) No glazing damage from impact forces
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (8) No glazing
- (9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 0 24. LF 0 25. RF 0 26. LR 0 27. RR 0

28. BL 0 29. Roof 0 30. Other 0

- (0) No occupant contact to glazing or no glazing
- (1) Glazing contacted by occupant but no glazing damage
- (2) Glazing in place and cracked by occupant contact
- (3) Glazing in place and holed by occupant contact
- (4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
- (5) Glazing out-of-place by occupant contact and holed by occupant contact
- (6) Glazing disintegrated by occupant contact
- (9) Unknown if contacted by occupant

If No Glazing Damage *And* No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS 1 32. LF 0 33. RF 0 34. LR 0 35. RR 0

36. BL 0 37. Roof 0 38. Other 0

- (0) No glazing contact and no damage, or no glazing
- (1) AS-1 — Laminated
- (2) AS-2 — Tempered
- (3) AS-3 — Tempered-tinted
- (4) AS-14 — Glass/Plastic
- (8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

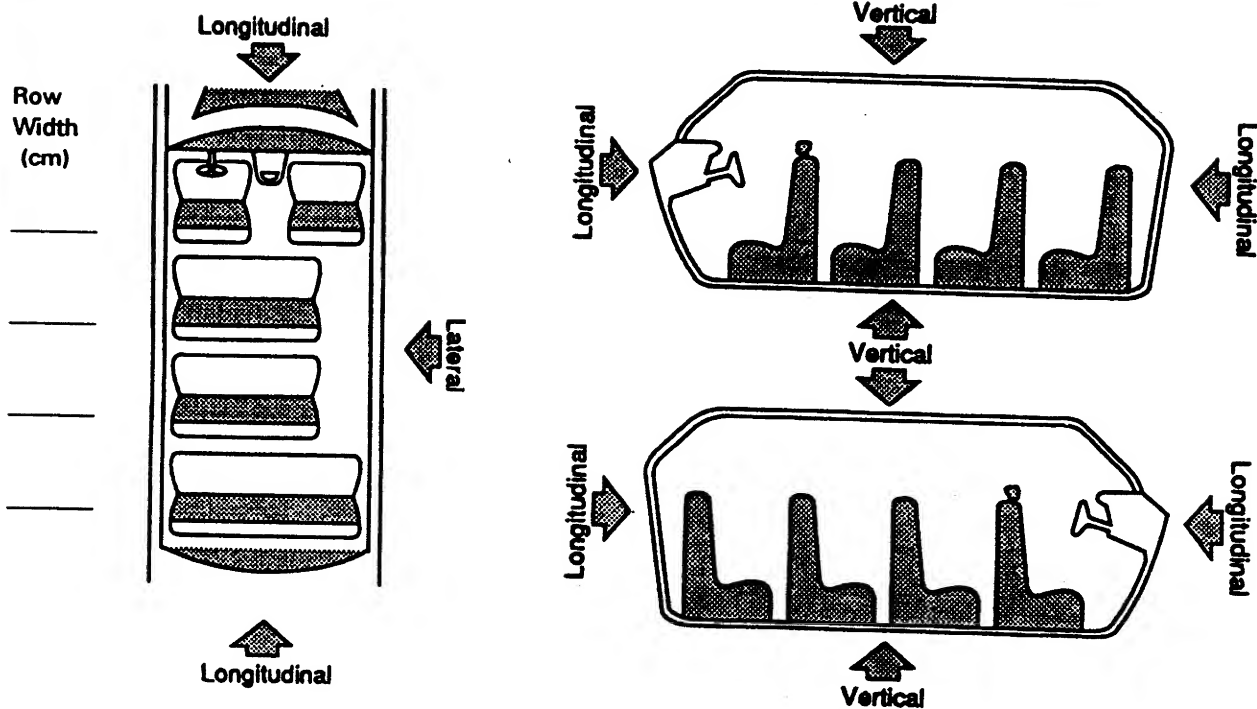
39. WS 1 40. LF 0 41. RF 0 42. LR 0 43. RR 0

44. BL 0 45. Roof 0 46. Other 0

- (0) No glazing contact and no damage, or no glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (9) Unknown

# INTRUSION WORKSHEET

**Note: Sketch intruded areas**

[illegible]

**Document no more than the 15 most severe intrusions**



## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

## INTRUDING COMPONENT

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. _____	48. _____	49. _____	50. _____
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

*Interior Components*

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): \_\_\_\_\_

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

*Exterior Components*

- (30) Hood
- (31) Outside surface of this vehicle (specify): \_\_\_\_\_
- (32) Other exterior object in the environment (specify): \_\_\_\_\_
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): \_\_\_\_\_
- (99) Unknown

## LOCATION OF INTRUSION

Front Seat  
 (11) Left  
 (12) Middle  
 (13) Right

Fourth Seat  
 (41) Left  
 (42) Middle  
 (43) Right

Second Seat  
 (21) Left  
 (22) Middle  
 (23) Right

(97) Catastrophic  
 (98) Other enclosed area (specify) \_\_\_\_\_

(99) Unknown

Third Seat  
 (31) Left  
 (32) Middle  
 (33) Right

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

## STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

No Damage

## STEERING COLUMN

87. Steering Column Type 2

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_

(9) Unknown

88. Blank X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

89. Blank X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

90. Blank X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

91. Blank X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

92. Steering Rim/Spoke Deformation 0 0

Code actual measured

deformation to the nearest centimeter

- (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

93. Location of Steering Rim/Spoke Deformation 0 0

(00) No steering rim deformation

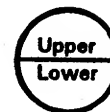
## Quarter Sections

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

## INSTRUMENT PANEL

94. Odometer Reading 0 / / ,000

10,716 kilometers—Code to the nearest 1,000 kilometers

- (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

6,659 miles X 1.6093 = 10,716 kilometers

Source: odometer95. Instrument Panel Damage from Occupant Contact? 0

- (0) No  
 (1) Yes  
 (9) Unknown

96. Knee Bolsters Deformed from Occupant Contact? 0

- (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

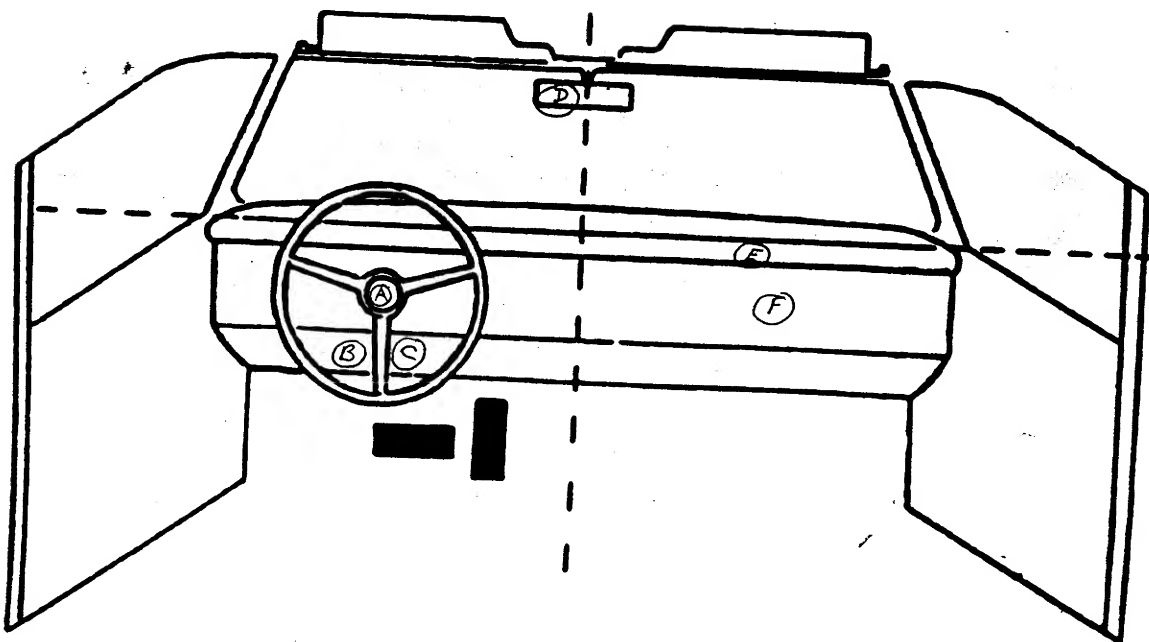
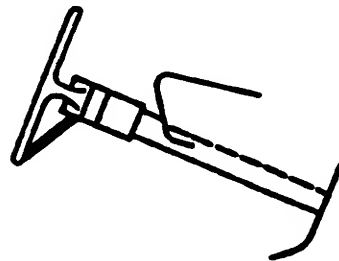
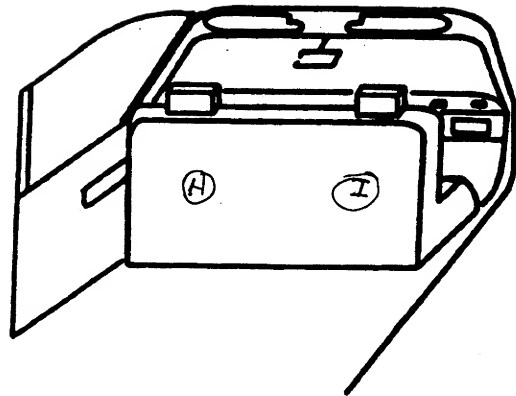
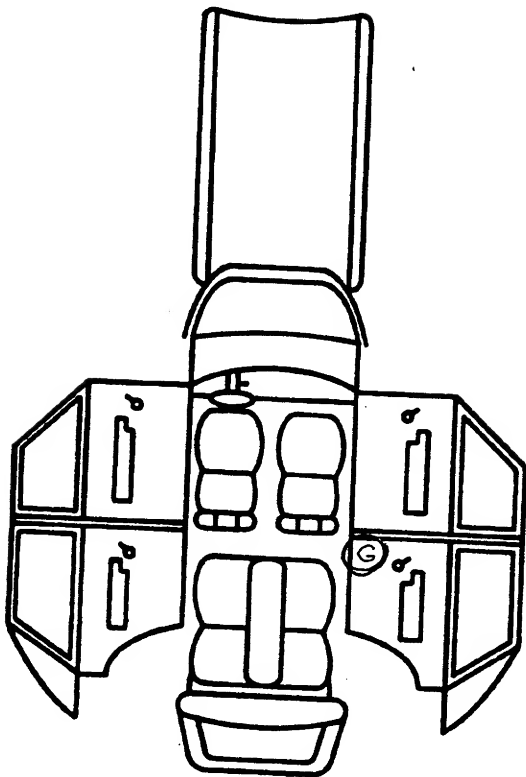
*cloth transfer only*

97. Did Glove Compartment Door Open During Collision(s)? 0

- (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

# VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure.  
Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.  
Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	Driver Airbag 45	1	Face	Lipstick contacts	1
B	09	1	L Knee	cloth transfer only	1
C	09	1	R Knee	cloth transfer only	1
D	02	?		Mirror broke at mount - no mirror fix - probable displacement	
E				due to contact with airbag	
F	45	2		Deployed passenger bag - dirt scuff	1
G	11	2	L Knee	Cloth transfer	1
H	33	4	R Foot	cracked plastic over B-pillar (lower)	1
I	40	3		scuff on seatback fabric	3
J	40	4		scuff on seatback fabric	3
K	41	1		Peening on tab - very slight stretching/fraying	2
L					
M					
N					

## CODES FOR INTERIOR COMPONENTS

## FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_
- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_
- (28) Left side window sill

## RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_
- (38) Right side window sill

## INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

- (46) Other occupants (specify): \_\_\_\_\_

- (47) Interior loose objects
- (48) Child safety seat (specify): \_\_\_\_\_

- (49) Other interior object (specify): \_\_\_\_\_

## ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

## FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

## REAR

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## AUTOMATIC RESTRAINTS

**NOTES:** Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

### AIR BAGS

		Left	Right
F I R S T	Availability/Function	/	/
	Deployment	/	/
	Failure	/	/

#### Air Bag System Availability/Function

- (0) Not equipped/not available  
(1) Air bag

#### Non-functional

- (2) Air bag disconnected (specify): \_\_\_\_\_

- (3) Air bag not reinstalled  
(9) Unknown

#### Air Bag System Deployment

- (0) Not equipped/not available  
(1) Air bag deployed during accident (as a result of impact)  
(2) Air bag deployed inadvertently just prior to accident  
(3) Air bag deployed, accident sequence undetermined  
(4) Nondeployed  
(5) Unknown if deployed  
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(9) Unknown

#### Did Air Bag System Fail?

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(9) Unknown

### AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	Ø	Ø
	Use	Ø	Ø
	Type	Ø	Ø
	Proper Use	Ø	Ø
	Failure Modes	Ø	Ø

#### Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available  
(1) 2 point automatic belts  
(2) 3 point automatic belts  
(3) Automatic belts - type unknown

#### Non-functional

- (4) Automatic belts destroyed or rendered inoperative  
(9) Unknown

#### Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Automatic belt in use  
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
(3) Automatic belt use unknown  
(9) Unknown

#### Automatic (Passive) Belt System Type

- (0) Not equipped/not available  
(1) Non-motorized system  
(2) Motorized system  
(9) Unknown

#### Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used  
(1) Automatic belt used properly  
(2) Automatic belt used properly with child safety seat

#### Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm  
(4) Automatic shoulder belt worn behind back  
(5) Automatic belt worn around more than one person  
(6) Lap portion of automatic belt worn on abdomen  
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_  
(8) Other improper use of automatic belt system (specify): \_\_\_\_\_  
(9) Unknown

#### Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use  
(1) No automatic belt failure(s)  
(2) Torn webbing (stretched webbing not included)  
(3) Broken buckle or latchplate  
(4) Upper anchorage separated  
(5) Other anchorage separated (specify): \_\_\_\_\_  
(6) Broken retractor  
(7) Combination of above (specify): \_\_\_\_\_  
(8) Other automatic belt failure (specify): \_\_\_\_\_  
(9) Unknown

## MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	04	0	04
	Use	04	00	04
	Failure Modes	1	0	1
SECOND	Availability	04	03	04
	Use	04	00	04
	Failure Modes	1	0	1
THIRD	Availability			
	Use			
	Failure Modes			
OTHER	Availability			
	Use			
	Failure Modes			

**Manual (Active) Belt System Availability**

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

**Integral Belt Partially Destroyed**

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown

**Manual (Active) Belt System Use**

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): \_\_\_\_\_
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown

**(08) Other belt used (specify):**

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

**Manual (Active) Belt Failure Modes During Accident**

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_
- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other manual belt failure (specify): \_\_\_\_\_
- (9) Unknown

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number		NOT	APPLICABLE			
1. Type of Child Safety Seat	/	No Child Seat Present				
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

### 1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

### 2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

### 3. Child Safety Seat Harness Usage

### 4. Child Safety Seat Shield Usage

### 5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

### 6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

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## HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	0	3
	Seat Type	02	00	02
	Seat Performance	1	6	1
	Seat Orientation	1	0	1
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	1	1	1
	Seat Orientation	1	1	1
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

## Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: \_\_\_\_\_

(9) Unknown

## Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_

- (10) Box mounted seat (i.e., van type)
- (99) Unknown

## Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown

## Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_

(9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No [☒] Yes [ ]

Describe indications of ejection and body parts involved in partial ejection(s):

*Not Applicable / No ejection*

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection
- (1) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

**Ejection Area**

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

**(9) Unknown****Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

**(9) Unknown****Medium Status (Immediately Prior to Impact)**

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

**ENTRAPMENT** No [☒] Yes [ ]

Describe entrapment mechanism:

*Not Applicable / No Entrapment*

Component(s):

(Note in vehicle interior diagram)



## INTERIOR VEHICLE LOG

### TO BE COMPLETED BY TEAM

1. PSU Number NCSI
2. Case Number—Stratum 9304
3. Researcher Completing Form [Redacted]
4. Vehicle Number 01

### TO BE COMPLETED BY ZONE CENTER

5. Documentation Of Integrity \_\_\_\_\_
6. Documentation Of Glazing \_\_\_\_\_
7. Documentation of Intrusions \_\_\_\_\_
8. Documentation of Steering Column/Wheel \_\_\_\_\_
9. Documentation of Occupant Contacts \_\_\_\_\_
10. Documentation of Restraint Systems \_\_\_\_\_
11. Documentation of Seats \_\_\_\_\_
12. Number of Interior Vehicle Slides \_\_\_\_\_
13. Interior Slides Subject Quality \_\_\_\_\_
14. Interior Slides Quality \_\_\_\_\_

#### Codes For Log Variables 5-11 and 13-14

- (0) Not applicable
- (1) Substandard - beyond researcher control
- (2) Substandard
- (3) Standard

15. Number of Coded Intrusions \_\_\_\_\_

### DATA STATUS OF VARIABLE NUMBERS 4-97

#### Integrity

4	5	6	7	8	9	10	11	12	13	14

#### Glazing

15	16	17	18	19	20	21	22	23	24	25

26	27	28	29	30	31	32	33	34	35	36

37	38	39	40	41	42	43	44	45	46

#### Intrusion

47	48	49	50	51	52	53	54	55	56	57

58	59	60	61	62	63	64	65	66	67	68

69	70	71	72	73	74	75	76	77	78	79

80	81	82	83	84	85	86

#### Steering Column/Wheel and Instrument Panel

87	88	89	90	91	92	93	94	95	96	97
	XX	XX	XX	XX						

#### Data Status Codes:

- (Blank) Correct
- (1) Derived error
- (2) Non-correctable error
- (3) Correctable error
- (4) Change—no error
- (5) Sequencing error
- (7) Incorrect edit override
- (8) MDE error
- (9) Unknown coded



# OCCUPANT ASSESSMENT FORM

## OCCUPANT'S SEATING

1. Primary Sampling Unit Number NCST  
2. Case Number - Stratum 9304  
3. Vehicle Number 01  
4. Occupant Number 01

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 37  
Code actual age at time of accident.  
(00) Less than one year old (specify by month):  
(97) 97 years and older  
(99) Unknown

6. Occupant's Sex 2  
(1) Male  
(2) Female  
(9) Unknown

7. Occupant's Height 170  
Code actual height to the nearest  
centimeter.  
(999) Unknown  
67 inches X 2.54 = 170.18 centimeters

8. Occupant's Weight 068  
Code actual weight to the nearest  
kilogram.  
(999) Unknown  
150 pounds X .4536 = 68.04 kilograms

9. Occupant's Role 1  
(1) Driver  
(2) Passenger  
(9) Unknown

10. Occupant's Seat Position 11  
*Front Seat*  
(11) Left side  
(12) Middle  
(13) Right side  
(14) Other (specify):  
(15) On or in the lap of another occupant

*Second Seat*  
(21) Left side  
(22) Middle  
(23) Right side  
(24) Other (specify):  
(25) On or in the lap of another occupant

*Third Seat*  
(31) Left side  
(32) Middle  
(33) Right side  
(34) Other (specify):  
(35) On or in the lap of another occupant

*Fourth Seat*  
(41) Left side  
(42) Middle  
(43) Right side  
(44) Other (specify):  
(45) On or in the lap of another occupant

(97) In or on unenclosed area  
(98) Other seat (specify):  
(99) Unknown

11. Occupant's Posture 0  
(0) Normal posture

*Abnormal posture*  
(1) Kneeling or standing on seat  
(2) Lying on or across seat  
(3) Kneeling, standing or sitting in front of seat  
(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window  
(5) Sitting on a console  
(6) Lying back in a reclined seat position  
(7) Bracing with feet or hands on a surface in front  
of seat  
(8) Other abnormal posture (specify):  
(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection ☐

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree ✓
- (9) Unknown

13. Ejection Area ☐

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium ☐

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) ☐

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment ☐

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

18. Manual (Active) Belt System Use 0 4

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify): \_\_\_\_\_

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Air Bag System Availability/Function 1

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 1

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 1

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown" \_\_\_\_\_

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position

3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify):

(9) Unknown

26. Seat Type (this Occupant Position)

02

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify):

(10) Box mounted seat (i.e., van type)

(99) Unknown

27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify):

(7) Combination of above (specify):

(8) Other (specify):

(9) Unknown

## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model ○ ○ ○  
 (000) No child safety seat  
 Applicable codes are found in your NASS CDS  
 Data Collection, Coding and Editing  
 (950) Built-in child safety seat  
 (997) Other make/model (specify): \_\_\_\_\_

(998) Unknown make/model  
 (999) Unknown if child safety seat used

29. Type of Child Safety Seat ○  
 (0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat  
 (7) Other type child safety seat (specify): \_\_\_\_\_

(8) Unknown child safety seat type  
 (9) Unknown if child safety seat used

30. Child Safety Seat Orientation ○ ○  
 (00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify): \_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify): \_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify): \_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage ○ ○

32. Child Safety Seat Shield Usage ○ ○

33. Child Safety Seat Tether Usage ○ ○

Note: Options below applicable to  
 Variables OA31-OA33.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether  
 added, not used  
 (02) After market harness/shield/tether used  
 (03) Child safety seat used, but no after market  
 harness/shield/tether added  
 (09) Unknown if harness/shield/tether  
 added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used  
 (12) Harness/shield/tether used  
 (19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used  
 (22) Harness/shield/tether used  
 (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used



## INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 3

- (0) O - No injury  
(1) C - Possible injury  
(2) B - Nonincapacitating injury  
(3) A - Incapacitating injury  
(4) K - Killed  
(5) U - Injury, severity unknown  
(6) Died prior to accident  
(9) Unknown

35. Treatment - Mortality 4

- (0) No treatment  
(1) Fatal  
(2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization  
(4) Transported and released  
(5) Treatment at scene - nontransported  
(6) Treatment later  
(8) Treatment - other (specify):  
(9) Unknown
- Per PAR and Interviewee - No Record per Hospital*

36. Type Of Medical Facility (for Initial Treatment) 1

- (0) Not treated at a medical facility  
(1) Trauma center  
(2) Hospital  
(3) Medical clinic  
(4) Physician's office  
(5) Treatment later at medical facility  
(8) Other (specify):  
(9) Unknown

37. Hospital Stay 00

- (00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.  
(61) 61 days or more  
(99) Unknown

38. Working Days Lost 97

Code the number of days (up through 60) that the occupant lost from work due to the accident  
(00) No working days lost  
(61) 61 days or more  
(62) Fatally injured  
(97) Not working prior to accident  
(99) Unknown

STOP - GO TO VARIABLE 44 ON PAGE 7

VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER

39. Time to Death 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)  
(00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death  
(00) Not fatal or no additional causes  
(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

43. Number of Recorded Injuries for This Occupant 04

Code the actual number of injuries recorded for this occupant.  
(00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

## AUTOMATIC BELT SYSTEM

44. Automatic (Passive) Belt System Availability/ Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

45. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):

- (3) Automatic belt use unknown
- (9) Unknown

46. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):
- (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify):
- (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify):

- (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER**

## TRAUMA DATA

50. Glasgow Coma Scale (GCS) Score (at Medical Facility) 0 2

- (00) Not injured
- (01) Injured - not treated at medical facility
- (02) No GCS Score at medical facility
- (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
- (97) Injured, details unknown
- (99) Unknown if injured

51. Was the Occupant Given Blood? 1

- (1) No - blood not given
- (2) Yes - blood given (specify units):
- (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 0 1

- (00) Not injured
- (01) Injured, ABGs not measured or reported
- (02-50) Code the actual value of the HCO<sub>3</sub>
- (96) ABGs reported, HCO<sub>3</sub> unknown
- (97) Injured, details unknown
- (99) Unknown if injured

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO [ ☒ ] YES [ ☐ ]

UPDATE CANDIDATE?

NO [ ☒ ] YES [ ☐ ]



## OCCUPANT ASSESSMENT LOG

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

TO BE COMPLETED BY TEAM																																																							
<p>1. PSU Number <u>NCST</u></p> <p>2. Case Number—Stratum <u>9304</u></p> <p>3. Researcher Completing Form <u>[Redacted]</u></p> <p>4. Vehicle Number <u>01</u></p> <p>5. Occupant Number <u>01</u></p> <p>6. Interviewer Number <u>[Redacted]</u></p> <p>7. Date Interview Completed <u>[Redacted] / [Redacted] / 93</u></p> <p>8. Date Official Medical Data Requested <u>[Redacted] / [Redacted] / 93</u></p> <p>9. Date Official Medical Data Obtained <u>[Redacted] / [Redacted] / 93</u> <i>informed no record at facility</i></p> <p>10. Occupant's Role <u>1</u> (1) Driver (2) Passenger (3) Unknown</p> <p>11. Interviewee For This Occupant <u>1</u> (0) No interview (1) Same person  <i>Surrogate</i> (2) Other occupant (3) Relative or friend (4) Multiple interviewees from above categories (specify): _____</p> <p>12. Manner Of Interview <u>1</u> (0) No attempt (1) Telephone (2) In-person (3) Questionnaire (9) Unknown (for Zone Center use only)</p> <p>13. Result Of Last Interview Attempt <u>13</u> (01) Unable to contact or locate (02) Hit and run (03) Fatal—surrogate not available (04) In intensive care—surrogate not available (05) Out-of-state resident (06) Refused interview (07) Insurance company refusal (08) Attorney refusal or litigation (09) No return of questionnaire (10) Other (specify): _____ (11) Return of completed questionnaire (12) Partial interview (13) Complete interview</p>	<p>14. Was This Occupant Injured? <u>1</u> (0) No (1) Yes (9) Unknown</p> <p>15. Status of Medical Release <u>1</u> (0) Occupant not injured (1) Medical release not required at medical facility  <i>Medical Release Required</i> (2) Required -- not obtained (3) Required -- obtained</p> <p>16. Injury Treatment Status <u>05</u> (00) Occupant not injured (01) No treatment (02) Fatal—died before hospitalization <i>per occupant</i> (03) Fatal—died after hospitalization (04) Hospitalization (05) Emergency room treatment only (06) Treatment at physician's office (07) Treatment at scene or self treatment (08) Outpatient surgery (09) Treatment at medical facility—unknown level of treatment (99) Unknown</p> <table border="0" style="width: 100%;"><thead><tr><th style="text-align: left;">17. Injury Information</th><th style="text-align: center;">Form Received</th><th style="text-align: center;">Record Status</th></tr></thead><tbody><tr><td colspan="3"><i>Official</i></td></tr><tr><td>a. Autopsy (invasive examination)</td><td style="text-align: center;">___</td><td style="text-align: center;">___</td></tr><tr><td>b. Post-ER medical record which includes information about death based on non-invasive examination</td><td style="text-align: center;">___</td><td style="text-align: center;">___</td></tr><tr><td>c. Admission record/summary of admission/discharge face sheet</td><td style="text-align: center;">___</td><td style="text-align: center;">___</td></tr><tr><td>d. Discharge summary</td><td style="text-align: center;">___</td><td style="text-align: center;">___</td></tr><tr><td>e. Operative report</td><td style="text-align: center;">___</td><td style="text-align: center;">___</td></tr><tr><td>f. Radiographic record(s) post ER visit</td><td style="text-align: center;">___</td><td style="text-align: center;">___</td></tr><tr><td>g. History and physical examination and/or consultation records</td><td style="text-align: center;">___</td><td style="text-align: center;">___</td></tr><tr><td>h. Emergency room records</td><td style="text-align: center;">___</td><td style="text-align: center;"><u>01</u></td></tr><tr><td>i. Radiographic record(s) associated with ER visit</td><td style="text-align: center;">___</td><td style="text-align: center;">___</td></tr><tr><td>j. Private physician</td><td style="text-align: center;">___</td><td style="text-align: center;">___</td></tr><tr><td colspan="3"><i>Unofficial</i></td></tr><tr><td>k. Lay coroner</td><td style="text-align: center;">___</td><td style="text-align: center;">___</td></tr><tr><td>l. EMS record</td><td style="text-align: center;">___</td><td style="text-align: center;">___</td></tr><tr><td>m. Interviewee</td><td style="text-align: center;">___</td><td style="text-align: center;">___</td></tr><tr><td>n. Other source (specify): _____</td><td style="text-align: center;"><u>B</u></td><td style="text-align: center;">___</td></tr><tr><td>o. Police report</td><td style="text-align: center;"><u>B</u></td><td style="text-align: center;">___</td></tr></tbody></table> <p>(See reverse side of this page for codes for variable 13)</p> <p>18. Medical Facility Code _____</p>	17. Injury Information	Form Received	Record Status	<i>Official</i>			a. Autopsy (invasive examination)	___	___	b. Post-ER medical record which includes information about death based on non-invasive examination	___	___	c. Admission record/summary of admission/discharge face sheet	___	___	d. Discharge summary	___	___	e. Operative report	___	___	f. Radiographic record(s) post ER visit	___	___	g. History and physical examination and/or consultation records	___	___	h. Emergency room records	___	<u>01</u>	i. Radiographic record(s) associated with ER visit	___	___	j. Private physician	___	___	<i>Unofficial</i>			k. Lay coroner	___	___	l. EMS record	___	___	m. Interviewee	___	___	n. Other source (specify): _____	<u>B</u>	___	o. Police report	<u>B</u>	___
17. Injury Information	Form Received	Record Status																																																					
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o. Police report	<u>B</u>	___																																																					

# National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Log

## CODES FOR OCCUPANT ASSESSMENT LOG VARIABLE 16 (INJURY INFORMATION)

### OCCUPANT UPDATE FORM RECEIVED (FIRST COLUMN)

- (Blank) No or not applicable  
(1) Yes

### STATUS OF MEDICAL RECORD (SECOND COLUMN)

- (Blank) Not medically treated/record not required  
(01) No record of treatment at medical facility  
(02) Medical release required—not obtained  
(03) Injury not related to accident  
(04) Noncooperative hospital  
(05) Hospital out-of-study area  
(06) Private physician would not release data  
(07) Unknown if medically treated  
(08) To be updated  
(09) Record not received before file closeout  
(10) Record not obtained  
(11) Record obtained  
(12) Partial record obtained—not to be updated  
(13) Partial record obtained—to be updated

## TO BE COMPLETED BY ZONE CENTER

18. Documentation of Occupant Interview  
(Excludes Injury Data)  
(0) Not applicable  
(1) Substandard  
(2) Standard

### DATA STATUS OF VARIABLE NUMBERS 4-52

4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45	46	47
48	49	50	51	52						

### Data Status Codes:

- |                           |                             |
|---------------------------|-----------------------------|
| (Blank) Correct           | (5) Sequencing error        |
| (1) Derived error         | (7) Incorrect edit override |
| (2) Non-correctable error | (8) MDE error               |
| (3) Correctable error     | (9) Unknown coded           |
| (4) Change—no error       |                             |



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

# OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number	<u>NCSI</u>	3. Vehicle Number	<u>01</u>
2. Case Number - Stratum	<u>9304</u>	4. Occupant Number	<u>01</u>

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	O.I.C.-A.I.S.						Injury Source	Injury Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect				
1st	5. <u>7</u>	6. <u>6</u>	7. <u>4</u>	8. <u>02</u>	9. <u>78</u>	10. <u>1</u>	11. <u>6</u>	12. <u>41</u>	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>7</u>	17. <u>6</u>	18. <u>4</u>	19. <u>04</u>	20. <u>78</u>	21. <u>1</u>	22. <u>7</u>	23. <u>41</u>	24. <u>1</u>	25. <u>1</u>	26. <u>00</u>
3rd	27. <u>7</u>	28. <u>7</u>	29. <u>9</u>	30. <u>02</u>	31. <u>02</u>	32. <u>1</u>	33. <u>1</u>	34. <u>45</u>	35. <u>1</u>	36. <u>1</u>	37. <u>00</u>
4th	38. <u>7</u>	39. <u>7</u>	40. <u>9</u>	41. <u>04</u>	42. <u>02</u>	43. <u>1</u>	44. <u>2</u>	45. <u>45</u>	46. <u>1</u>	47. <u>1</u>	48. <u>00</u>
5th	49. <u>  </u>	50. <u>  </u>	51. <u>  </u>	52. <u>  </u>	53. <u>  </u>	54. <u>  </u>	55. <u>  </u>	56. <u>  </u>	57. <u>  </u>	58. <u>  </u>	59. <u>  </u>
6th	60. <u>  </u>	61. <u>  </u>	62. <u>  </u>	63. <u>  </u>	64. <u>  </u>	65. <u>  </u>	66. <u>  </u>	67. <u>  </u>	68. <u>  </u>	69. <u>  </u>	70. <u>  </u>
7th	71. <u>  </u>	72. <u>  </u>	73. <u>  </u>	74. <u>  </u>	75. <u>  </u>	76. <u>  </u>	77. <u>  </u>	78. <u>  </u>	79. <u>  </u>	80. <u>  </u>	81. <u>  </u>
8th	82. <u>  </u>	83. <u>  </u>	84. <u>  </u>	85. <u>  </u>	86. <u>  </u>	87. <u>  </u>	88. <u>  </u>	89. <u>  </u>	90. <u>  </u>	91. <u>  </u>	92. <u>  </u>
9th	93. <u>  </u>	94. <u>  </u>	95. <u>  </u>	96. <u>  </u>	97. <u>  </u>	98. <u>  </u>	99. <u>  </u>	100. <u>  </u>	101. <u>  </u>	102. <u>  </u>	103. <u>  </u>
10th	104. <u>  </u>	105. <u>  </u>	106. <u>  </u>	107. <u>  </u>	108. <u>  </u>	109. <u>  </u>	110. <u>  </u>	111. <u>  </u>	112. <u>  </u>	113. <u>  </u>	114. <u>  </u>

## OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Blood Alcohol  
Level (mg/dl)

BAL = \_\_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_\_

Units of Blood  
Given

Units = \_\_\_\_

Arterial Blood  
Gases

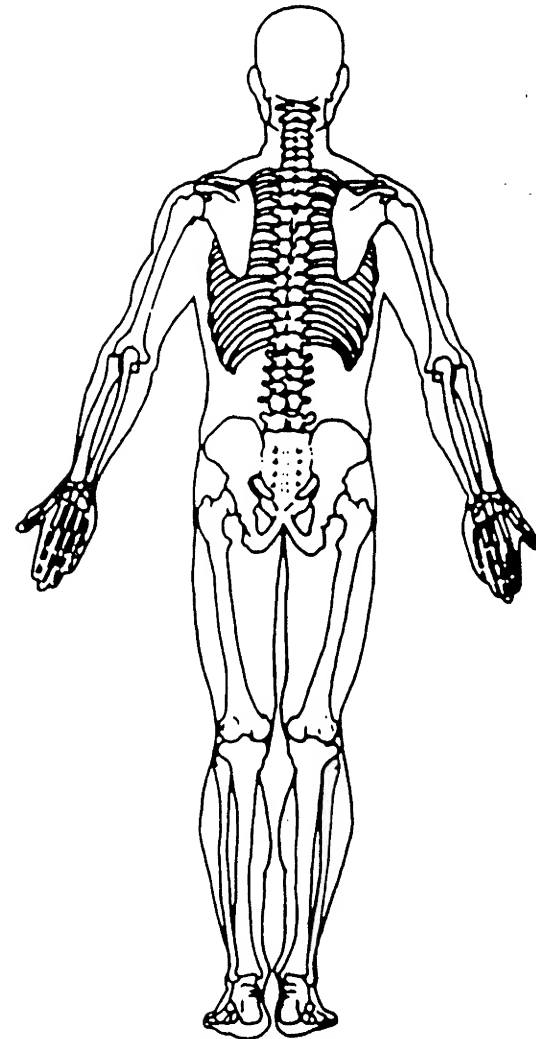
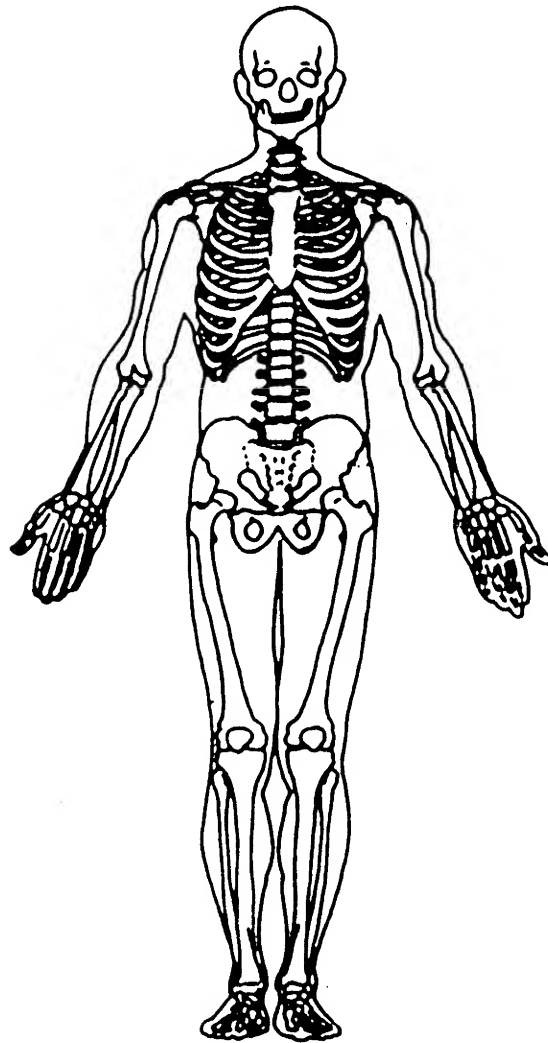
pH = \_\_\_\_

PO<sub>2</sub> = \_\_\_\_

PCO<sub>2</sub> = \_\_\_\_

HCO<sub>3</sub> = \_\_\_\_

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

BEST AVAILABLE COPY

# OCCUPANT INJURY LOG

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

TO BE COMPLETED BY ZONE CENTER		SECOND LEVEL REVIEW																							
<p>1. PSU Number <u>NCST</u></p> <p>2. Case Number - Stratum <u>9304</u></p> <p>3. Vehicle Number <u>1</u></p> <p>4. Occupant Number <u>01</u></p> <p>5. Documentation of Interview Data on Manikin Listing _____ (0) Not applicable (1) Substandard - beyond researcher control (2) Substandard (3) Standard</p>		<p>16. Documentation of Official Data on Manikin _____ (0) Not applicable (1) Substandard - beyond researcher control (2) Substandard (3) Standard</p> <p style="text-align: right;">AIS      AIS 1-7      3-8</p> <p>17. Number of Rows Added by Second Level Reviewer _____</p> <p>18. Number of Rows Deleted by Second Level Reviewer _____</p>																							
INJURY INFORMATION CODING																									
<p>6. Date Data Included _____ With Initial Submission Coded</p> <p>7. Coded By (Initials) _____</p> <p>8. Date Update Received _____</p> <p>9. Date Data Included _____ With Updated Submission Coded</p> <p>10. Coded By (Initials) _____</p> <p style="text-align: right;">AIS      AIS 1-7      3-8</p> <p>11. Number of Injury Rows Coded _____</p> <p>12. Number of Unknown Injuries _____</p> <p>13. Number of Unknown Injury Contact Mechanisms _____</p>		<p style="text-align: center;"><b>ERROR STATUS FOR INJURY VARIABLES</b></p> <p>Coding Errors (total number in each column)</p> <table border="1"><tr><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>		5	6	7	8	9	10	11	12	13	14	15											
5	6	7	8	9	10	11	12	13	14	15															
<p>14. Date MDE'd _____</p> <p>15. MDE'd By (Initials) _____</p>		<p>19. Date Of Second Level Review _____/_____/_____</p> <p>20. Reviewed By (Initials) _____</p>																							



# OCCUPANT ASSESSMENT FORM

## OCCUPANT'S SEATING

1. Primary Sampling Unit Number NCST  
2. Case Number - Stratum 9304  
3. Vehicle Number 01  
4. Occupant Number 02

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 10  
Code actual age at time of accident.  
(00) Less than one year old (specify by month):

(97) 97 years and older  
(99) Unknown

6. Occupant's Sex 1  
(1) Male  
(2) Female  
(9) Unknown

7. Occupant's Height 122  
Code actual height to the nearest  
centimeter.  
(999) Unknown

48 inches X 2.54 = 122 centimeters

8. Occupant's Weight 032  
Code actual weight to the nearest  
kilogram.  
(999) Unknown

70 pounds X .4536 = 31.75 kilograms

9. Occupant's Role 2  
(1) Driver  
(2) Passenger  
(9) Unknown

10. Occupant's Seat Position 13

### Front Seat

- (11) Left side  
(12) Middle  
(13) Right side  
(14) Other (specify):  
(15) On or in the lap of another occupant

### Second Seat

- (21) Left side  
(22) Middle  
(23) Right side  
(24) Other (specify):  
(25) On or in the lap of another occupant

### Third Seat

- (31) Left side  
(32) Middle  
(33) Right side  
(34) Other (specify):  
(35) On or in the lap of another occupant

### Fourth Seat

- (41) Left side  
(42) Middle  
(43) Right side  
(44) Other (specify):  
(45) On or in the lap of another occupant

- (97) In or on unenclosed area  
(98) Other seat (specify):  
(99) Unknown

11. Occupant's Posture 0  
(0) Normal posture

### Abnormal posture

- (1) Kneeling or standing on seat  
(2) Lying on or across seat  
(3) Kneeling, standing or sitting in front of seat  
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window  
(5) Sitting on a console  
(6) Lying back in a reclined seat position  
(7) Bracing with feet or hands on a surface in front of seat  
(8) Other abnormal posture (specify):  
(9) Unknown



## EJECTION/ENTRAPMENT

12. Ejection ☐

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area ☐

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium ☐

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) ☐

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment ☐

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown

18. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify): \_\_\_\_\_

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify): \_\_\_\_\_

(99) Unknown if belt used

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown

21. Air Bag System Availability/Function 1

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled

(9) Unknown

22. Air Bag System Deployment 1

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 1

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_

(9) Unknown

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown

(9) Police indicated "unknown"

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

26. Seat Type (this Occupant Position)

02

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model   0  0  0  

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat   0  

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation   0  0  

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage   0  0  32. Child Safety Seat Shield Usage   0  0  33. Child Safety Seat Tether Usage   0  0  Note: Options below applicable to  
Variables OA31-OA33.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

## INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 0

- (0) O - No injury  
(1) C - Possible injury  
(2) B - Nonincapacitating injury  
(3) A - Incapacitating injury  
(4) K - Killed  
(5) U - Injury, severity unknown  
(6) Died prior to accident  
(9) Unknown

35. Treatment - Mortality 0

- (0) No treatment  
(1) Fatal  
(2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization  
(4) Transported and released  
(5) Treatment at scene - nontransported  
(6) Treatment later  
(8) Treatment - other (specify):  
\_\_\_\_\_  
(9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 0

- (0) Not treated at a medical facility  
(1) Trauma center  
(2) Hospital  
(3) Medical clinic  
(4) Physician's office  
(5) Treatment later at medical facility  
(8) Other (specify):  
\_\_\_\_\_  
(9) Unknown

37. Hospital Stay 0 0

- (00) Not Hospitalized  
\_\_\_\_\_ Code the number of days (up through 60)  
that the occupant stayed in hospital.  
(61) 61 days or more  
(99) Unknown

38. Working Days Lost 9 7

- \_\_\_\_\_ Code the number of days  
(up through 60) that the occupant  
lost from work due to the accident  
(00) No working days lost  
(61) 61 days or more  
(62) Fatally injured  
(97) Not working prior to accident  
(99) Unknown

**STOP - GO TO VARIABLE 44 ON PAGE 7****VARIABLES 39 THROUGH 43 ARE  
COMPLETED BY THE ZONE CENTER**39. Time to Death 0 0

- \_\_\_\_\_ Code number of hours from time of  
accident to time of death up through 24  
hours. If time of death is greater than 24  
hours, code number of days. (Note: 1 day =  
31, 2 days = 32, ... n days = 30 + n up  
through 30 days = 60)  
(00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

40. 1st Medically Reported Cause of Death 0 041. 2nd Medically Reported Cause of Death 0 042. 3rd Medically Reported Cause of Death 0 0

- \_\_\_\_\_ Code the Occupant Injury from line  
number(s) for the medically reported  
injury(s) which reportedly contributed to  
this occupant's death  
(00) Not fatal or no additional causes  
(97) Other result (includes fatal ruled  
disease) (specify):  
\_\_\_\_\_

(99) Unknown

43. Number of Recorded Injuries for  
This Occupant 0 1

- \_\_\_\_\_ Code the actual number of  
injuries recorded for this occupant.  
(00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

**AUTOMATIC BELT SYSTEM****44. Automatic (Passive) Belt System Availability/ Function** 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

**Non-functional**

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

**45. Automatic (Passive) Belt System Use** 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): \_\_\_\_\_
- (3) Automatic belt use unknown
- (9) Unknown

**46. Automatic (Passive) Belt System Type** 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

**47. Proper Use of Automatic (Passive) Belt System** 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

**Automatic Belt Used Improperly**

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_
- (8) Other improper use of automatic belt system (specify): \_\_\_\_\_
- (9) Unknown

**48. Automatic (Passive) Belt Failure Modes During Accident** 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_
- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other automatic belt failure (specify): \_\_\_\_\_
- (9) Unknown

**49. Seat Orientation (this Occupant Position)** 1

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER****TRAUMA DATA****50. Glasgow Coma Scale (GCS) Score** 01  
(at Medical Facility)

- (00) Not injured
- (01) Injured - not treated at medical facility
- (02) No GCS Score at medical facility
- (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
- (97) Injured, details unknown
- (99) Unknown if injured

**51. Was the Occupant Given Blood?** 1

- (1) No - blood not given
- (2) Yes - blood given (specify units): \_\_\_\_\_
- (9) Unknown if blood given

**52. Arterial Blood Gases (ABG) - HCO<sub>3</sub>** 01

- (00) Not injured
- (01) Injured, ABGs not measured or reported
- (02-50) Code the actual value of the HCO<sub>3</sub>
- (96) ABGs reported, HCO<sub>3</sub> unknown
- (97) Injured, details unknown
- (99) Unknown if injured

**ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?****NA****NO [ ] YES [ ]****UPDATE CANDIDATE?****NO [ ] YES [ ]**



# OCCUPANT ASSESSMENT LOG

## TO BE COMPLETED BY TEAM

1. PSU Number NCSI
2. Case Number—Stratum 9304
3. Researcher Completing Form [redacted]
4. Vehicle Number 01
5. Occupant Number 02
6. Interviewer Number [redacted]
7. Date Interview Completed [redacted] 93
8. Date Official Medical Data Requested N/A
9. Date Official Medical Data Obtained N/A
10. Occupant's Role 2
  - (1) Driver
  - (2) Passenger
  - (3) Unknown
11. Interviewee For This Occupant 4
  - (0) No interview
  - (1) Same person

*Surrogate*

  - (2) Other occupant
  - (3) Relative or friend
  - (4) Multiple interviewees from above categories (specify): Driver / Mother
12. Manner Of Interview 1
  - (0) No attempt
  - (1) Telephone
  - (2) In-person
  - (3) Questionnaire
  - (9) Unknown (for Zone Center use only)
13. Result Of Last Interview Attempt 13
  - (01) Unable to contact or locate
  - (02) Hit and run
  - (03) Fatal—surrogate not available
  - (04) In intensive care—surrogate not available
  - (05) Out-of-state resident
  - (06) Refused interview
  - (07) Insurance company refusal
  - (08) Attorney refusal or litigation
  - (09) No return of questionnaire
  - (10) Other (specify): \_\_\_\_\_
  - (11) Return of completed questionnaire
  - (12) Partial interview
  - (13) Complete interview

## 14. Was This Occupant Injured?

- 1
- (0) No
  - (1) Yes
  - (9) Unknown

## 15. Status of Medical Release

- 1
- (0) Occupant not injured
  - (1) Medical release not required at medical facility

## Medical Release Required

- (2) Required — not obtained
- (3) Required — obtained

## 16. Injury Treatment Status

- 01
- (00) Occupant not injured
  - (01) No treatment
  - (02) Fatal—died before hospitalization
  - (03) Fatal—died after hospitalization
  - (04) Hospitalization
  - (05) Emergency room treatment only
  - (06) Treatment at physician's office
  - (07) Treatment at scene or self treatment
  - (08) Outpatient surgery
  - (09) Treatment at medical facility—unknown level of treatment
  - (99) Unknown

## 17. Injury Information

### Official

- |  | Form Received | Record Status |
|--|---------------|---------------|
| a. Autopsy (invasive examination)  | ___           | ___           |
| b. Post-ER medical record which includes information about death based on non-invasive examination | ___           | ___           |
| c. Admission record/summary of admission/discharge face sheet                                      | ___           | ___           |
| d. Discharge summary   | ___           | ___           |
| e. Operative report  | ___           | ___           |
| f. Radiographic record(s) post ER visit  | ___           | ___           |
| g. History and physical examination and/or consultation records                                    | ___           | ___           |
| h. Emergency room records  | ___           | ___           |
| i. Radiographic record(s) associated with ER visit   | ___           | ___           |
| j. Private physician   | ___           | ___           |

### Unofficial

- |                            |          |     |
|----------------------------|----------|-----|
| k. Lay coroner             | ___      | ___ |
| l. EMS record              | ___      | ___ |
| m. Interviewee             | ___      | ___ |
| n. Other source (specify): | <u>B</u> | ___ |
| o. Police report           | <u>B</u> | ___ |

(See reverse side of this page for codes for variable 13)

## 18. Medical Facility Code

# National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Log

## CODES FOR OCCUPANT ASSESSMENT LOG VARIABLE 16 (INJURY INFORMATION)

### OCCUPANT UPDATE FORM RECEIVED (FIRST COLUMN)

- (Blank) No or not applicable  
(1) Yes

### STATUS OF MEDICAL RECORD (SECOND COLUMN)

- (Blank) Not medically treated/record not required  
(01) No record of treatment at medical facility  
(02) Medical release required—not obtained  
(03) Injury not related to accident  
(04) Noncooperative hospital  
(05) Hospital out-of-study area  
(06) Private physician would not release data  
(07) Unknown if medically treated  
(08) To be updated  
(09) Record not received before file closeout  
(10) Record not obtained  
(11) Record obtained  
(12) Partial record obtained—not to be updated  
(13) Partial record obtained—to be updated

## TO BE COMPLETED BY ZONE CENTER

18. Documentation of Occupant Interview \_\_\_\_\_  
(Excludes Injury Data)  
(0) Not applicable  
(1) Substandard  
(2) Standard

### DATA STATUS OF VARIABLE NUMBERS 4-52

4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45	46	47
48	49	50	51	52						

### Data Status Codes:

- |                           |                             |
|---------------------------|-----------------------------|
| (Blank) Correct           | (5) Sequencing error        |
| (1) Derived error         | (7) Incorrect edit override |
| (2) Non-correctable error | (8) MDE error               |
| (3) Correctable error     | (9) Unknown coded           |
| (4) Change—no error       |                             |





U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

# OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

NCSI

3. Vehicle Number

01

2. Case Number - Stratum

9304

4. Occupant Number

02

## INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	O.I.C.-A.I.S.						Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
		Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect				
1st	5. <u>7</u>	6. <u>8</u>	7. <u>9</u>	8. <u>00</u>	9. <u>00</u>	10. <u>1</u>	11. <u>1</u>	12. <u>45</u>	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>  </u>	17. <u>  </u>	18. <u>  </u>	19. <u>  </u>	20. <u>  </u>	21. <u>  </u>	22. <u>  </u>	23. <u>  </u>	24. <u>  </u>	25. <u>  </u>	26. <u>  </u>
3rd	27. <u>  </u>	28. <u>  </u>	29. <u>  </u>	30. <u>  </u>	31. <u>  </u>	32. <u>  </u>	33. <u>  </u>	34. <u>  </u>	35. <u>  </u>	36. <u>  </u>	37. <u>  </u>
4th	38. <u>  </u>	39. <u>  </u>	40. <u>  </u>	41. <u>  </u>	42. <u>  </u>	43. <u>  </u>	44. <u>  </u>	45. <u>  </u>	46. <u>  </u>	47. <u>  </u>	48. <u>  </u>
5th	49. <u>  </u>	50. <u>  </u>	51. <u>  </u>	52. <u>  </u>	53. <u>  </u>	54. <u>  </u>	55. <u>  </u>	56. <u>  </u>	57. <u>  </u>	58. <u>  </u>	59. <u>  </u>
6th	60. <u>  </u>	61. <u>  </u>	62. <u>  </u>	63. <u>  </u>	64. <u>  </u>	65. <u>  </u>	66. <u>  </u>	67. <u>  </u>	68. <u>  </u>	69. <u>  </u>	70. <u>  </u>
7th	71. <u>  </u>	72. <u>  </u>	73. <u>  </u>	74. <u>  </u>	75. <u>  </u>	76. <u>  </u>	77. <u>  </u>	78. <u>  </u>	79. <u>  </u>	80. <u>  </u>	81. <u>  </u>
8th	82. <u>  </u>	83. <u>  </u>	84. <u>  </u>	85. <u>  </u>	86. <u>  </u>	87. <u>  </u>	88. <u>  </u>	89. <u>  </u>	90. <u>  </u>	91. <u>  </u>	92. <u>  </u>
9th	93. <u>  </u>	94. <u>  </u>	95. <u>  </u>	96. <u>  </u>	97. <u>  </u>	98. <u>  </u>	99. <u>  </u>	100. <u>  </u>	101. <u>  </u>	102. <u>  </u>	103. <u>  </u>
10th	104. <u>  </u>	105. <u>  </u>	106. <u>  </u>	107. <u>  </u>	108. <u>  </u>	109. <u>  </u>	110. <u>  </u>	111. <u>  </u>	112. <u>  </u>	113. <u>  </u>	114. <u>  </u>

## OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

\_\_\_ No

\_\_\_ Yes

Blood Alcohol  
Level (mg/dl)

BAL = \_\_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_\_

Units of Blood  
Given

Units = \_\_\_\_

Arterial Blood  
Gases

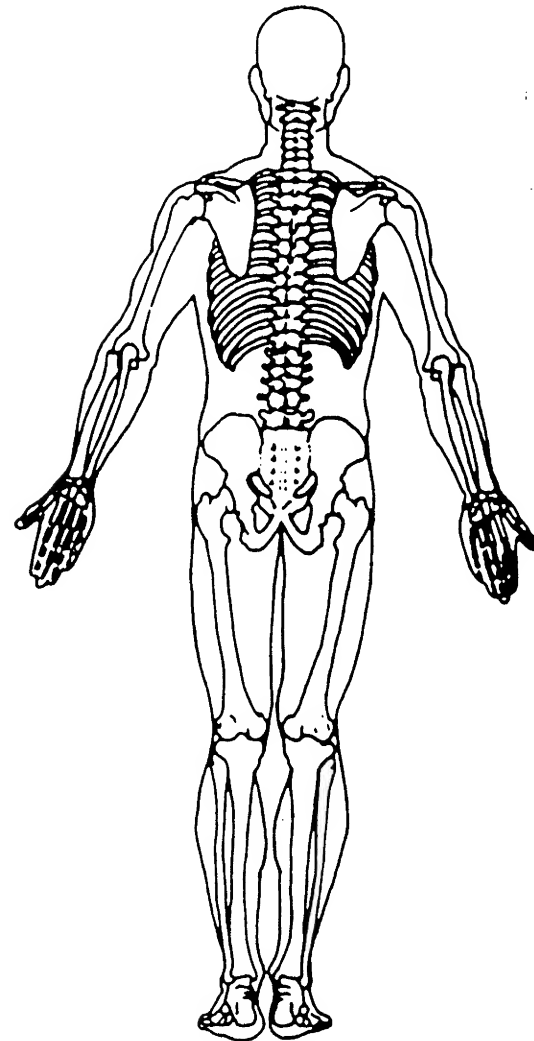
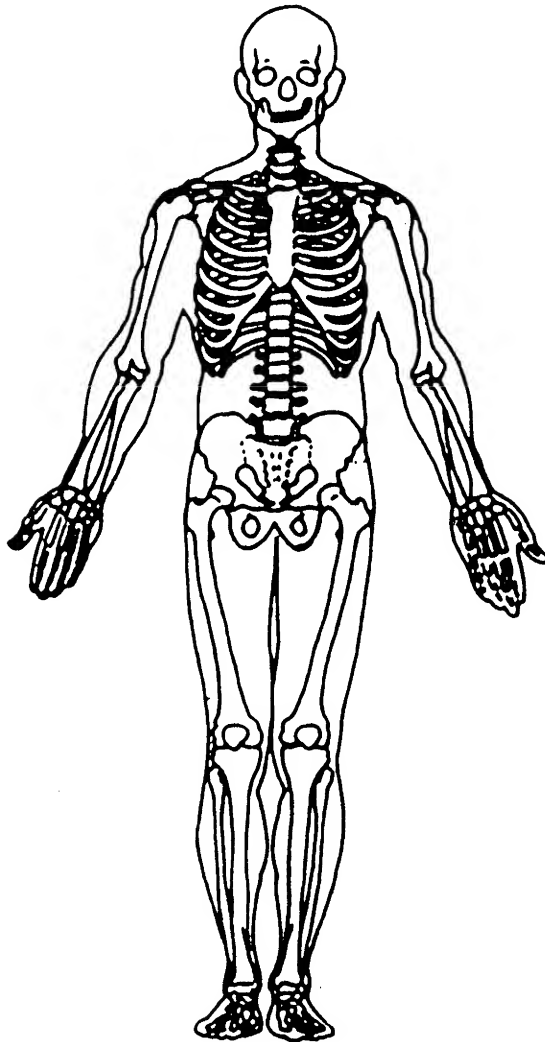
pH = \_\_\_\_

PO<sub>2</sub> = \_\_\_\_

PCO<sub>2</sub> = \_\_\_\_

HCO<sub>3</sub> = \_\_\_\_

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



# OCCUPANT INJURY LOG

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

TO BE COMPLETED BY ZONE CENTER		SECOND LEVEL REVIEW																																			
<p>1. PSU Number _____</p> <p>2. Case Number—Stratum _____</p> <p>3. Vehicle Number _____</p> <p>4. Occupant Number _____</p> <p>5. Documentation of Interview Date on Manikin Listing _____</p> <p>(0) Not applicable</p> <p>(1) Substandard - beyond researcher control</p> <p>(2) Substandard</p> <p>(3) Standard</p>	<p>16. Documentation of Official Data on Manikin _____</p> <p>(0) Not applicable</p> <p>(1) Substandard - beyond researcher control</p> <p>(2) Substandard</p> <p>(3) Standard</p> <p style="text-align: right;">AIS      AIS 1-7      3-6</p> <p>17. Number of Rows Added by Second Level Reviewer _____</p> <p>18. Number of Rows Deleted by Second Level Reviewer _____</p>																																				
INJURY INFORMATION CODING		ERROR STATUS FOR INJURY VARIABLES																																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Injury Information</th> <th style="width: 50%; text-align: center;">Contact Mechanisms &amp; Intrusions</th> </tr> </thead> <tbody> <tr> <td>6. Date Data Included _____ With Initial Submission Coded</td> <td>_____</td> </tr> <tr> <td>7. Coded By (Initials) _____</td> <td>_____</td> </tr> <tr> <td>8. Date Update Received _____</td> <td>_____</td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Injury Information</th> <th style="width: 50%; text-align: center;">Contact Mechanisms &amp; Intrusions</th> </tr> </thead> <tbody> <tr> <td>9. Date Data Included _____ With Updated Submission Coded</td> <td>_____</td> </tr> <tr> <td>10. Coded By (Initials) _____</td> <td>_____</td> </tr> </tbody> </table>	Injury Information	Contact Mechanisms & Intrusions	6. Date Data Included _____ With Initial Submission Coded	_____	7. Coded By (Initials) _____	_____	8. Date Update Received _____	_____	Injury Information	Contact Mechanisms & Intrusions	9. Date Data Included _____ With Updated Submission Coded	_____	10. Coded By (Initials) _____	_____	<p>Coding Errors (total number in each column)</p> <table style="width: 100%;"> <tr> <td style="width: 5%;">5</td> <td style="width: 5%;">6</td> <td style="width: 5%;">7</td> <td style="width: 5%;">8</td> <td style="width: 5%;">9</td> <td style="width: 5%;">10</td> <td style="width: 5%;">11</td> <td style="width: 5%;">12</td> <td style="width: 5%;">13</td> <td style="width: 5%;">14</td> <td style="width: 5%;">15</td> </tr> <tr> <td style="height: 20px; border: 1px solid black;"></td> <td style="height: 20px; border: 1px solid black;"></td> <td style="height: 20px; border: 1px solid black;"></td> <td style="height: 20px; border: 1px solid black;"></td> <td style="height: 20px; border: 1px solid black;"></td> <td style="height: 20px; border: 1px solid black;"></td> <td style="height: 20px; border: 1px solid black;"></td> <td style="height: 20px; border: 1px solid black;"></td> <td style="height: 20px; border: 1px solid black;"></td> <td style="height: 20px; border: 1px solid black;"></td> <td style="height: 20px; border: 1px solid black;"></td> </tr> </table>	5	6	7	8	9	10	11	12	13	14	15											
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5	6	7	8	9	10	11	12	13	14	15																											
<p>11. Number of Injury Rows Coded _____</p> <p>12. Number of Unknown Injuries _____</p> <p>13. Number of Unknown Injury Contact Mechanisms _____</p>	<p>19. Date Of Second Level Review _____/_____/_____</p> <p>20. Reviewed By (Initials) _____</p>																																				
MDE STATUS																																					
<p>14. Date MDE'd _____</p> <p>15. MDE'd By (Initials) _____</p>																																					



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT ASSESSMENT FORM

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

### OCCUPANT'S SEATING

1. Primary Sampling Unit Number

NCSI

2. Case Number - Stratum

9304

3. Vehicle Number

01

4. Occupant Number

03

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

14

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

1

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

178

Code actual height to the nearest  
centimeter.

(999) Unknown

70 inches X 2.54 = 177.8 centimeters

8. Occupant's Weight

066

Code actual weight to the nearest  
kilogram.

(999) Unknown

145 pounds X .4536 = 65.77 kilograms

9. Occupant's Role

2

(1) Driver

(2) Passenger

(9) Unknown

10. Occupant's Seat Position

21

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front  
of seat

(8) Other abnormal posture (specify):

(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection ☐

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area ☐

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium ☐

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) ☐

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment ☐

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

18. Manual (Active) Belt System Use 0 4

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify): \_\_\_\_\_

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify): \_\_\_\_\_

(99) Unknown if belt used \_\_\_\_\_

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

(3) Shoulder belt worn under arm

(4) Shoulder belt worn behind back or seat

(5) Belt worn around more than one person

(6) Lap belt worn on abdomen

(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Air Bag System Availability/Function 0

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled

(9) Unknown

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_
- (8) Restrained, type unknown
- (9) Police indicated "unknown"

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position0

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## 26. Seat Type (this Occupant Position)

03

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

## 27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model ☐ ☐ ☐  
(000) No child safety seat  
Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing  
(950) Built-in child safety seat  
(997) Other make/model (specify): \_\_\_\_\_  
(998) Unknown make/model  
(999) Unknown if child safety seat used

29. Type of Child Safety Seat ☐  
(0) No child safety seat  
(1) Infant seat  
(2) Toddler seat  
(3) Convertible seat  
(4) Booster seat  
(7) Other type child safety seat (specify): \_\_\_\_\_  
(8) Unknown child safety seat type  
(9) Unknown if child safety seat used

30. Child Safety Seat Orientation ☐ ☐  
(00) No child safety seat  
  
*Designed for Rear Facing for This Age/Weight*  
(01) Rear facing  
(02) Forward facing  
(08) Other orientation (specify): \_\_\_\_\_  
(09) Unknown orientation

- Designed For Forward Facing for This Age/Weight*  
(11) Rear facing  
(12) Forward facing  
(18) Other orientation (specify): \_\_\_\_\_  
(19) Unknown orientation

- Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*  
(21) Rear facing  
(22) Forward facing  
(28) Other orientation (specify): \_\_\_\_\_  
(29) Unknown orientation  
(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage ☐ ☐

32. Child Safety Seat Shield Usage ☐ ☐

33. Child Safety Seat Tether Usage ☐ ☐

Note: Options below applicable to  
Variables OA31-OA33.  
(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

- (01) After market harness/shield/tether  
added, not used  
(02) After market harness/shield/tether used  
(03) Child safety seat used, but no after market  
harness/shield/tether added  
(09) Unknown if harness/shield/tether  
added or used

*Designed With Harness/Shield/Tether*

- (11) Harness/shield/tether not used  
(12) Harness/shield/tether used  
(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

- (21) Harness/shield/tether not used  
(22) Harness/shield/tether used  
(29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used



## INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 0

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 0

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):  
\_\_\_\_\_

(9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 0

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

(9) Unknown

37. Hospital Stay 00

(00) Not Hospitalized

\_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 97

\_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident

- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP - GO TO VARIABLE 44 ON PAGE 7**

**VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**

39. Time to Death 00

\_\_\_\_\_ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
- (96) Fatal - ruled disease
- (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

\_\_\_\_\_ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
- (97) Other result (includes fatal ruled disease) (specify):  
\_\_\_\_\_

(99) Unknown

43. Number of Recorded Injuries for This Occupant 00

\_\_\_\_\_ Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
- (97) Injured, details unknown
- (99) Unknown if injured

**AUTOMATIC BELT SYSTEM****44. Automatic (Passive) Belt System Availability/Function** ☐

- (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

**Non-functional**

- (4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

**45. Automatic (Passive) Belt System Use** ☐

- (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

**46. Automatic (Passive) Belt System Type** ☐

- (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

**47. Proper Use of Automatic (Passive) Belt System** ☐

- (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

**Automatic Belt Used Improperly**

- (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
 (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

**48. Automatic (Passive) Belt Failure Modes During Accident** ☐

- (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

**49. Seat Orientation (this Occupant Position)** ☐

- (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA****50. Glasgow Coma Scale (GCS) Score** ☐ ☐

- (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

**51. Was the Occupant Given Blood?** ☐

- (1) No - blood not given  
 (2) Yes - blood given (specify units):  
 (9) Unknown if blood given

**52. Arterial Blood Gases (ABG) - HCO<sub>3</sub>** ☐ ☐

- (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION? ☒ NO [ ] YES [ ]

UPDATE CANDIDATE?

NO [ ] YES [ ]



## OCCUPANT ASSESSMENT LOG

### TO BE COMPLETED BY TEAM

1. PSU Number NC5I
2. Case Number—Stratum 9304
3. Researcher Completing Form [redacted]
4. Vehicle Number 01
5. Occupant Number 03
6. Interviewer Number [redacted]
7. Date Interview Completed [redacted] 93
8. Date Official Medical Data Requested N/A
9. Date Official Medical Data Obtained
10. Occupant's Role 2
  - (1) Driver
  - (2) Passenger
  - (3) Unknown
11. Interviewee For This Occupant 4
  - (0) No interview
  - (1) Same person

*Surrogate*

  - (2) Other occupant
  - (3) Relative or friend
  - (4) Multiple interviewees from above categories (specify): \* Driver / Mother
12. Manner Of Interview 1
  - (0) No attempt
  - (1) Telephone
  - (2) In-person
  - (3) Questionnaire
  - (9) Unknown (for Zone Center use only)
13. Result Of Last Interview Attempt 13
  - (01) Unable to contact or locate
  - (02) Hit and run
  - (03) Fatal—surrogate not available
  - (04) In intensive care—surrogate not available
  - (05) Out-of-state resident
  - (06) Refused interview
  - (07) Insurance company refusal
  - (08) Attorney refusal or litigation
  - (09) No return of questionnaire
  - (10) Other (specify):
  - (11) Return of completed questionnaire
  - (12) Partial interview
  - (13) Complete interview

14. Was This Occupant Injured? 0  
(0) No  
(1) Yes  
(9) Unknown

15. Status of Medical Release 0  
(0) Occupant not injured  
(1) Medical release not required at medical facility

*Medical Release Required*

- (2) Required -- not obtained  
(3) Required -- obtained

16. Injury Treatment Status 00  
(00) Occupant not injured  
(01) No treatment  
(02) Fatal—died before hospitalization  
(03) Fatal—died after hospitalization  
(04) Hospitalization  
(05) Emergency room treatment only  
(06) Treatment at physician's office  
(07) Treatment at scene or self treatment  
(08) Outpatient surgery  
(09) Treatment at medical facility—unknown level of treatment  
(99) Unknown

17. Injury Information
- |  | Form Received | Record Status |
|--|---------------|---------------|
| <i>Official</i>  |               |               |
| a. Autopsy (invasive examination)  | ___           | ___           |
| b. Post-ER medical record which includes information about death based on non-invasive examination | ___           | ___           |
| c. Admission record/summary of admission/discharge face sheet                                      | ___           | ___           |
| d. Discharge summary   | ___           | ___           |
| e. Operative report  | ___           | ___           |
| f. Radiographic record(s) post ER visit  | ___           | ___           |
| g. History and physical examination and/or consultation records                                    | ___           | ___           |
| h. Emergency room records  | ___           | ___           |
| i. Radiographic record(s) associated with ER visit   | ___           | ___           |
| j. Private physician   | ___           | ___           |
| <i>Unofficial</i>  |               |               |
| k. Lay coroner   | ___           | ___           |
| l. EMS record  | ___           | ___           |
| m. Interviewee   | ___           | ___           |
| n. Other source (specify): <u>                    </u>   | <u>B</u>      | ___           |
| o. Police report   | <u>B</u>      | ___           |

(See reverse side of this page for codes for variable 13)

18. Medical Facility Code

# National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Log

## CODES FOR OCCUPANT ASSESSMENT LOG VARIABLE 16 (INJURY INFORMATION)

### OCCUPANT UPDATE FORM RECEIVED (FIRST COLUMN)

(Blank) No or not applicable

(1) Yes

### STATUS OF MEDICAL RECORD (SECOND COLUMN)

(Blank) Not medically treated/record not required

(01) No record of treatment at medical facility

(02) Medical release required—not obtained

(03) Injury not related to accident

(04) Noncooperative hospital

(05) Hospital out-of-study area

(06) Private physician would not release data

(07) Unknown if medically treated

(08) To be updated

(09) Record not received before file closeout

(10) Record not obtained

(11) Record obtained

(12) Partial record obtained—not to be updated

(13) Partial record obtained—to be updated

## TO BE COMPLETED BY ZONE CENTER

### 18. Documentation of Occupant Interview

(Excludes Injury Data)

(0) Not applicable

(1) Substandard

(2) Standard

### DATA STATUS OF VARIABLE NUMBERS 4-52

4 5 6 7 8 9 10 11 12 13 14

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15 16 17 18 19 20 21 22 23 24 25

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26 27 28 29 30 31 32 33 34 35 36

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37 38 39 40 41 42 43 44 45 46 47

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48 49 50 51 52

--	--	--	--	--

### Data Status Codes:

(Blank) Correct

(1) Derived error

(2) Non-correctable error

(3) Correctable error

(4) Change—no error

(5) Sequencing error

(7) Incorrect edit override

(8) MDE error

(9) Unknown coded



## OCCUPANT ASSESSMENT FORM

### OCCUPANT'S SEATING

1. Primary Sampling Unit Number

NCSI

2. Case Number - Stratum

9304

3. Vehicle Number

01

4. Occupant Number

04

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

12

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

1

(1) Male

(2) Female

(9) Unknown

7. Occupant's Height

170

Code actual height to the nearest  
centimeter.

(999) Unknown

67 inches X 2.54 = 170.18 centimeters

8. Occupant's Weight

068

Code actual weight to the nearest  
kilogram.

(999) Unknown

150 pounds X .4536 = 68.04 kilograms

9. Occupant's Role

2

(1) Driver

(2) Passenger

(9) Unknown

10. Occupant's Seat Position

23

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with another  
occupant or to look out a rear window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in front  
of seat

(8) Other abnormal posture (specify):

(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

18. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify): \_\_\_\_\_

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Air Bag System Availability/Function 0

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown" \_\_\_\_\_

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position0

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_

(9) Unknown

## 26. Seat Type (this Occupant Position)

03

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_

- (10) Box mounted seat (i.e., van type)
- (99) Unknown

## 27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown



## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 0 0 0

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation 0 0

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 0 032. Child Safety Seat Shield Usage 0 033. Child Safety Seat Tether Usage 0 0Note: Options below applicable to  
Variables OA31-OA33.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

## INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 0

- (0) O - No injury  
(1) C - Possible injury  
(2) B - Nonincapacitating injury  
(3) A - Incapacitating injury  
(4) K - Killed  
(5) U - Injury, severity unknown  
(6) Died prior to accident  
(9) Unknown

35. Treatment - Mortality 0

- (0) No treatment  
(1) Fatal  
(2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization  
(4) Transported and released  
(5) Treatment at scene - nontransported  
(6) Treatment later  
(8) Treatment - other (specify):  
\_\_\_\_\_  
(9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 0

- (0) Not treated at a medical facility  
(1) Trauma center  
(2) Hospital  
(3) Medical clinic  
(4) Physician's office  
(5) Treatment later at medical facility  
(8) Other (specify):  
\_\_\_\_\_  
(9) Unknown

37. Hospital Stay 00

- (00) Not Hospitalized

\_\_\_\_\_ Code the number of days (up through 60)  
that the occupant stayed in hospital.  
(61) 61 days or more  
(99) Unknown

38. Working Days Lost 97

\_\_\_\_\_ Code the number of days  
(up through 60) that the occupant  
lost from work due to the accident  
(00) No working days lost  
(61) 61 days or more  
(62) Fatally injured  
(97) Not working prior to accident  
(99) Unknown

**STOP - GO TO VARIABLE 44 ON PAGE 7****VARIABLES 39 THROUGH 43 ARE  
COMPLETED BY THE ZONE CENTER**39. Time to Death 00

\_\_\_\_\_ Code number of hours from time of  
accident to time of death up through 24  
hours. If time of death is greater than 24  
hours, code number of days. (Note: 1 day =  
31, 2 days = 32, ... n days = 30 + n up  
through 30 days = 60)  
(00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

\_\_\_\_\_ Code the Occupant Injury from line  
number(s) for the medically reported  
injury(s) which reportedly contributed to  
this occupant's death  
(00) Not fatal or no additional causes  
(97) Other result (includes fatal ruled  
disease) (specify):  
\_\_\_\_\_

(99) Unknown

43. Number of Recorded Injuries for  
This Occupant 00

\_\_\_\_\_ Code the actual number of  
injuries recorded for this occupant.  
(00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

**AUTOMATIC BELT SYSTEM****44. Automatic (Passive) Belt System Availability/Function** 0

- (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

**Non-functional**

- (4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

**45. Automatic (Passive) Belt System Use** 0

- (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

**46. Automatic (Passive) Belt System Type** 0

- (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

**47. Proper Use of Automatic (Passive) Belt System** 0

- (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

**Automatic Belt Used Improperly**

- (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
 (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

**48. Automatic (Passive) Belt Failure Modes During Accident** 0

- (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

**49. Seat Orientation (this Occupant Position)** 1

- (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA****50. Glasgow Coma Scale (GCS) Score** 0 0  
(at Medical Facility)

- (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

**51. Was the Occupant Given Blood?** 1

- (1) No - blood not given  
 (2) Yes - blood given (specify units):  
 (9) Unknown if blood given

**52. Arterial Blood Gases (ABG) - HCO<sub>3</sub>** 0 0

- (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION? N/A NO [ ] YES [ ]

UPDATE CANDIDATE?

NO [✓] YES [ ]

## OCCUPANT ASSESSMENT LOG

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

### TO BE COMPLETED BY TEAM

1. PSU Number NC52
2. Case Number—Stratum 9304
3. Researcher Completing Form [redacted]
4. Vehicle Number 01
5. Occupant Number 04
6. Interviewer Number [redacted]
7. Date Interview Completed [redacted] 93
8. Date Official Medical Data Requested \_\_\_/\_\_\_/\_\_\_
9. Date Official Medical Data Obtained \_\_\_/\_\_\_/\_\_\_
10. Occupant's Role 2  
(1) Driver  
(2) Passenger  
(3) Unknown
11. Interviewee For This Occupant 4  
(0) No interview  
(1) Same person  
  
*Surrogate*  
(2) Other occupant  
(3) Relative or friend  
(4) Multiple interviewees from above categories  
(specify): \* Driver / Mother
12. Manner Of Interview 1  
(0) No attempt  
(1) Telephone  
(2) In-person  
(3) Questionnaire  
(9) Unknown (for Zone Center use only)
13. Result Of Last Interview Attempt 13  
(01) Unable to contact or locate  
(02) Hit and run  
(03) Fatal—surrogate not available  
(04) In intensive care—surrogate not available  
(05) Out-of-state resident  
(06) Refused interview  
(07) Insurance company refusal  
(08) Attorney refusal or litigation  
(09) No return of questionnaire  
(10) Other (specify): \_\_\_\_\_  
(11) Return of completed questionnaire  
(12) Partial interview  
(13) Complete interview

14. Was This Occupant Injured?
- (0) No
- (1) Yes
- (9) Unknown
15. Status of Medical Release
- (0) Occupant not injured
- (1) Medical release not required at medical facility
- Medical Release Required*
- (2) Required — not obtained
- (3) Required — obtained
16. Injury Treatment Status
- (00) Occupant not injured
- (01) No treatment
- (02) Fatal—died before hospitalization
- (03) Fatal—died after hospitalization
- (04) Hospitalization
- (05) Emergency room treatment only
- (06) Treatment at physician's office
- (07) Treatment at scene or self treatment
- (08) Outpatient surgery
- (09) Treatment at medical facility—unknown level of treatment
- (99) Unknown

- | 17. Injury Information   | Form<br>Received | Record<br>Status |
|--|------------------|------------------|
| <b>Official</b>  |                  |                  |
| a. Autopsy (invasive examination)  | _____            | _____            |
| b. Post-ER medical record which includes information about death based on non-invasive examination | _____            | _____            |
| c. Admission record/summary of admission/discharge face sheet                                      | _____            | _____            |
| d. Discharge summary   | _____            | _____            |
| e. Operative report  | _____            | _____            |
| f. Radiographic record(s) post ER visit  | _____            | _____            |
| g. History and physical examination and/or consultation records                                    | _____            | _____            |
| h. Emergency room records  | _____            | _____            |
| i. Radiographic record(s) associated with ER visit   | _____            | _____            |
| j. Private physician   | _____            | _____            |
| <b>Unofficial</b>  |                  |                  |
| k. Lay coroner   | _____            | _____            |
| l. EMS record  | _____            | _____            |
| m. Interviewee   | _____            | _____            |
| n. Other source (specify): _____   | B                | _____            |
| o. Police report   | B                | _____            |

(See reverse side of this page for codes for variable 13)

- 18. Medical Facility Code**

# National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Log

## CODES FOR OCCUPANT ASSESSMENT LOG VARIABLE 16 (INJURY INFORMATION)

### OCCUPANT UPDATE FORM RECEIVED (FIRST COLUMN)

(Blank) No or not applicable

(1) Yes

### STATUS OF MEDICAL RECORD (SECOND COLUMN)

(Blank) Not medically treated/record not required

(01) No record of treatment at medical facility

(02) Medical release required—not obtained

(03) Injury not related to accident

(04) Noncooperative hospital

(05) Hospital out-of-study area

(06) Private physician would not release data

(07) Unknown if medically treated

(08) To be updated

(09) Record not received before file closeout

(10) Record not obtained

(11) Record obtained

(12) Partial record obtained—not to be updated

(13) Partial record obtained—to be updated

## TO BE COMPLETED BY ZONE CENTER

### 18. Documentation of Occupant Interview

(Excludes Injury Data)

(0) Not applicable

(1) Substandard

(2) Standard

### DATA STATUS OF VARIABLE NUMBERS 4-52

4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45	46	47
48	49	50	51	52						

### Data Status Codes:

(Blank) Correct

(1) Derived error

(2) Non-correctable error

(3) Correctable error

(4) Change—no error

(5) Sequencing error

(7) Incorrect edit override

(8) MDE error

(9) Unknown coded



## INTERVIEW FORM (A)

1. Primary Sampling Unit Number <u>NCSI</u>	Interviewee(s) Role or Name(s): _____
2. Case Number - Stratum <u>9 3 0 4</u>	<u>Driver of Case Vehicle</u>
3. Vehicle Number <u>0 1</u>	<u>Dodge Intrepid</u>

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

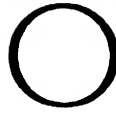
If the driver was not the person interviewed, was an appointment made for a follow-up interview?

### DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

travelling SB on [REDACTED] #3 lane, 30-40 MPH, did not see other vehicle until it was in front of me, hit brakes - (no lockup) but hit RR of other vehicle at same time hit brakes, next instant I lost vision (due to air bag) then was at [REDACTED], sideways in #3 lane, partially in #2 lane, facing westerly

### OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS

## ACCIDENT DIAGRAM



NORTH

The use of this diagram is optional. It may serve to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.



## INTERVIEW FORM (B)

1. Primary Sampling Unit Number NCST

2. Case Number - Stratum 9304

3. Vehicle Number 01

Interviewee(s) Role or Name(s): \_\_\_\_\_

Driver

### ACCIDENT DATA QUESTIONS

1. Can you tell me in which direction you were traveling?

☐ North ☒ South ☐ East ☐ West

(Optional - Where were you coming from or going to?

going home

2. In which lane were you traveling?

(Note: Lane 1 is designated as the right curb lane.)

☐ [1] ☐ [2] ☒ [3] ☐ [4] ☐ Other (specify): \_\_\_\_\_

3. Can you remember your estimated travel speed (in miles per hour) before the accident?

☐ Stopped ☐ 1-10 ☐ 10-20  
☐ 20-30 ☒ 30-40 ☐ 40-50  
☐ 50-60 ☐ 60-70 ☐ 70+

4. Just before the accident, can you tell me what you were intending to do or were doing?

☒ Going straight ☐ Stopped  
☐ slowing ☐ Accelerating  
☐ Turning left ☐ Turning right  
☐ Changing lanes to left ☐ Changing lanes to right  
☐ Backing  
☐ Other (specify): \_\_\_\_\_

5. Did you experience any loss of control due to weather conditions or mechanical problems?

☒ No  
☐ Yes (If yes, describe below)  
\_\_\_\_\_  
\_\_\_\_\_

6. Did you have to take any avoidance actions prior to the accident?

☐ No - Go to question 7  
☒ Yes - Go to question 6a

6a. What actions did you take?

☐ Braking with lock-up  
☒ Braking without lock-up  
☐ Releasing brakes  
☐ Accelerating  
☐ Steering left  
☐ Steering right  
☐ Other (specify): \_\_\_\_\_

7. Where was your vehicle at the time of the collision?

☒ Original travel lane ☐ Different travel lane  
☐ In intersection ☐ Off roadway to right  
☐ Off roadway to left  
☐ Other (specify): \_\_\_\_\_

8. Was your travel speed at the time of the collision different from your previous travel speed?

☒ No  
☐ Lower  
☐ higher  
☐ Unknown

8a. Can you estimate your speed at the time of the collision?

☐ Stopped ☐ 1-10 ☐ 10-20  
☐ 20-30 ☒ 30-40 ☐ 40-50  
☐ 50-60 ☐ 60-70 ☐ 70+

9. Immediately following the collision, can you describe how your vehicle moved to its stopped position?

rotated approx. 70-80 degrees  
in a CW manner

10. Can you tell me how many collisions your vehicle had during the accident and the source of the collisions?

just one - front of my vehicle  
to RR of other vehicle



1. Primary Sampling Unit Number NCSI 3. Vehicle Number 01  
 2. Case Number - Stratum 9304 4. Occupant Number 01

## VEHICLE/DRIVER DATA QUESTIONS

1. Can you tell me the year, make, model of your vehicle?

1993, Dodge, Intrepid  
 Year Make Model

2. Can you describe the damage to your vehicle?

whole front end, hood, fenders, bumper  
w/s all damaged

3. Was there any previous damage to your vehicle that is not related to this accident?

☒ No  
☐ Yes (If "yes", describe below)

4. Did any of the doors (hatch, tailgate) open during the accident?

☒ No  
☐ Yes (If "Yes", describe below)

5. Did any of the windows break during the accident?

☐ No  
☒ Yes (If "Yes", describe below)

w/s was damaged, stress frs

6. Does your vehicle have a glove compartment?

☐ No  
☒ Yes

6a. Did the glove compartment door come open during the accident?

☒ No  
☐ Yes  
☐ Unknown

7. Does your vehicle have "seat belts"?

☐ No (If "No", go to question 7b)  
☒ Yes (If "Yes", go to question 7a)

7a. Can you describe the type of seat belt for each seat?

Driver's seat	<input type="checkbox"/> Lap	<input checked="" type="checkbox"/> Lap and shoulder
Front seat middle	<input type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder
Front seat right	<input type="checkbox"/> Lap	<input checked="" type="checkbox"/> Lap and shoulder
Rear seat left	<input type="checkbox"/> Lap	<input checked="" type="checkbox"/> Lap and shoulder
Rear seat middle	<input checked="" type="checkbox"/> Lap	<input type="checkbox"/> Lap and shoulder
Rear seat right	<input type="checkbox"/> Lap	<input checked="" type="checkbox"/> Lap and shoulder

(Identify seat belts for third row and beyond)

7b. Were any of the belts removed or not functional prior to the accident?

☒ No  
☐ Yes (If "Yes", specify which belt and describe problem)

8. Do any of the front belts move along a motorized track when the door is opened or closed?

☒ No (If "No", go to question 9)  
☐ Yes (If "Yes", what seat location?)  
☐ Left Front  
☐ Right Front

8a. Were the motorized belts working properly before the accident?

☐ No (If "No", describe condition below)

☐ Yes

8b. Were the belts connected to the track prior to the accident?

☐ No  
☐ Yes  
☐ Unknown

9. Do any of the front "seat" belts attach to the door such that when the door is opened the belt travels with the door?

☒ No (go to question 10)  
☐ Yes

9a. Does this belt come across the \_\_\_\_\_?

☐ Chest only  
☐ Lap and chest

9b. Was this belt connected prior to the accident?

☐ No  
☐ Yes  
☐ Unknown

## AIR BAGS

10. Is your vehicle equipped with a driver's side air bag?

☐ No (go to question 11)  
☒ Yes (go to question 10a)  
☐ Unknown (go to question 11)

10a. Did the air bag inflate during the accident?

☐ No (go to questions 10b and 10c)  
☒ Yes (go to question 10e)

1. Primary Sampling Unit Number

NCST

3. Vehicle Number

01

2. Case Number - Stratum

9304

4. Occupant Number

01

## VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)

10b. Was the air bag wiring disconnected prior to the accident?

☒ No☐ Yes (If "Yes", describe previous condition)☐ Unknown

10c. Was your vehicle involved in any accidents prior to this accident which inflated the air bag?

☒ No (go to question 11)☐ Yes (go to question 10d)☐ Unknown

10d. Was the air bag re-installed after the accident?

☐ No (go to question 11)☐ Yes☐ Unknown

10e. Did the air bag inflate as you expected?

☐ No (If "No" describe below)☒ Yes☐ Unknown

11. Is your vehicle equipped with a passenger side air bag?

☐ No (If "No", go to question 12)☒ Yes (If "Yes", go to question 11a)☐ Unknown (If "Unknown", go to question 12)

11a. Did the passenger air bag inflate during the accident?

☐ No (go to question 11b)☒ Yes (go to question 12)

11b. Was the passenger air bag wiring disconnected prior to the accident?

☒ No☐ Yes (If "Yes", describe below)☐ Unknown

11c. Was the passenger air bag inflated in a previous accident?

☒ No (go to question 12)☐ Yes (go to question 11d)☐ Unknown

11d. Was the passenger air bag re-installed after the accident?

☐ No (go to question 12)☐ Yes☐ Unknown

11e. Did the passenger air bag inflate as you expected?

☐ No (If "No" describe below)☒ Yes☐ Unknown

## CHILD SAFETY SEAT

12. Was there a person in a child safety seat in your vehicle?

☒ No (If "No", go to question 13)☐ Yes☐ Unknown

12a. Can you tell me the manufacturer and model of the child safety seat?

12b. Can you describe the type of child safety seat?

☐ Infant☐ Toddler☐ Convertible☐ Booster☐ Other (specify):☐ Unknown

12c. Where was the child safety seat(s) located?

☐ [12] ☐ [13]☐ [21] ☐ [22] ☐ [23]☐ [31] ☐ [32] ☐ [33]☐ [Other] (specify):

12d. Can you tell me which direction the child safety seat was facing prior to the accident?

☐ Rear facing☐ Forward facing,☐ Other (specify):☐ Unknown

12e. Was a seat belt used to hold the child seat in place?

☐ No (If "No", go to question 12g)☐ Yes (If "Yes", go to question 12f)☐ Unknown

12f. Can you describe how the seat belt was secured to the child seat?

☐ Looped through designated rear framing struts?☐ Looped through arm rest slots?☐ Belt across safety shield?☐ Looped through rear frame outside the designated framing struts?☐ Other (specify):☐ Unknown

12g. What was the child safety seat equipped with at the time of purchase? (check all that apply)

☐ Harness☐ Shield☐ Tether strap

If any box is checked, ask questions 12h - 12i.

1. Primary Sampling Unit Number

NCST

3. Vehicle Number

01

2. Case Number - Stratum

9304

4. Occupant Number

01

## VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)

12h. Were any of these items added after you owned the child safety seat?

☐ Yes

(specify \_\_\_\_\_)

☐ No☐ Unknown

12i. Were any of these items used during the accident?

☐ Yes (If "Yes", check all that apply)☐ Harness☐ Shield☐ Tether strap)☐ No☐ Unknown

## OPTIONAL

If you do not know where the vehicle is or if the owner's permission is needed for inspection.

15. Do you know where the vehicle is currently located?

\_\_\_\_\_  
\_\_\_\_\_

16. May I take a look at your vehicle to assess the damage?

☐ No☐ Yes

## CARGO WEIGHT AND MILEAGE

13. Was there any cargo in your vehicle?

☒ No (If "No", go to question 14)☐ Yes (If "Yes", go to question 13a)☐ Unknown

13a. Can you estimate the weight of the cargo?

\_\_\_\_\_ lbs.

Cargo description  
\_\_\_\_\_  
\_\_\_\_\_

14. Can you tell me the mileage on the vehicle?

6600 miles

## DRIVER ONLY

17. What race do you consider yourself?

☐ White☒ Black☐ American Indian, Eskimo or Aleut, Asian or Pacific Islander☐ Other (specify: \_\_\_\_\_)☐ Unknown.

18. Are you of hispanic origin?

☒ No☐ Yes

1. Primary Sampling Unit Number

NCST

3. Vehicle Number

01

2. Case Number - Stratum

9304

4. Occupant Number

01

## OCCUPANT DATA QUESTIONS

1. Was there anyone else in your vehicle at the time of the accident?

☐ No (If "No", go to question 4)☒ Yes (If "Yes", specify number in question 2 below and then go to question 3)☐ Unknown

2. How many?

☐ One other person☐ Two other persons☒ Three other persons☐ Four other persons☐ Five other persons☐ Six other persons☐ Seven or more other persons  
(specify number:)

3. Where was this person sitting? (Circle seating positions)

11

[12]

[13]

[21]

[22]

[23]

[31]

[32]

[33]

☐ Other (specify:)

5d. Were you (Was he/she)

☒ Sitting upright or☐ Leaning to left side, or☐ Leaning to right side?

## OCCUPANT EJECTION

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?

☒ No (If "No", go to question 7)☐ Yes (If "Yes", go to question 6a)☐ Unknown

6a. Can you remember what part of the vehicle you were (he/she was) thrown out?

☐ No☐ Yes (Describe:)

## OCCUPANT RESTRAINT

7. Were you (Was he/she) wearing a seat belt just before the accident?

☐ No (If "No", go to question 8)☒ Yes☐ Unknown

7a. Were you (Was he/she) wearing the

☐ Lap belt?☒ Lap and Shoulder belt?☐ Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?

☐ Across the stomach☒ Low on lap☐ Other (specify:)☐ Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?

☒ Over the shoulder☐ Under the arm☐ Behind the back☐ Behind the seat☐ Other (specify:)

7d. Did any part of the belt system break or tear?

☒ No☐ Yes (If "Yes", describe)☐ Unknown

## OCCUPANT ENTRAPMENT

8. Were you (Was he/she) trapped in the vehicle?

☒ No☐ Yes (If "Yes", describe)☐ Unknown

## OCCUPANT CHARACTERISTICS

4. Can I have your (his/her) height, weight, age, and sex?

Height 5'7" Weight 150 Age 36Sex: ☐ Male ☒ Female

## OCCUPANT POSTURE

5. Can you tell me how you (he/she was) were sitting in your vehicle?

normal, upright, behind steering wheel, back against seat (shoulders not touching)

5a. Can you describe the location of your (his/her) feet just prior to the collision?

Right foot on gas, left flat on floor

5b. Can you describe the location of your (his/her) arms?

Right hand at 2 o'clock on wheel  
Left hand at 10 o'clock on wheel

5c. Was your (his/her) back resting against the seat back rest?

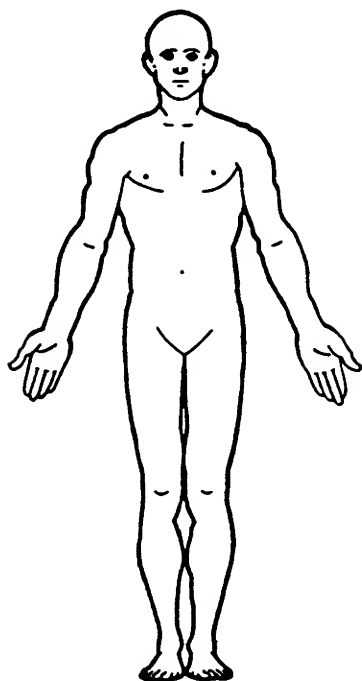
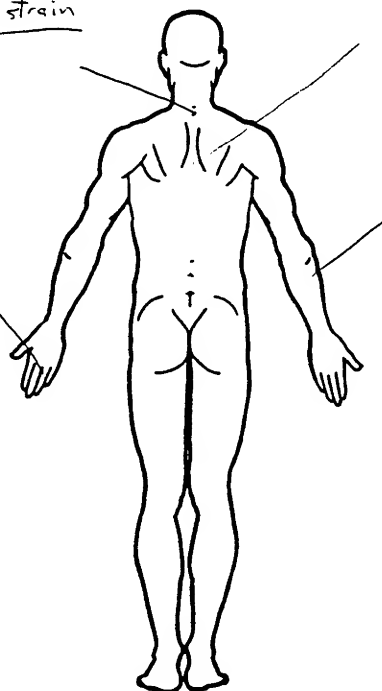
☐ No (If "No", describe the position)☒ Yes but shoulders not touching seat back☐ Unknown

PSU Number NCSI Case Number—Stratum 9304 Vehicle Number 01 Occupant Number 01

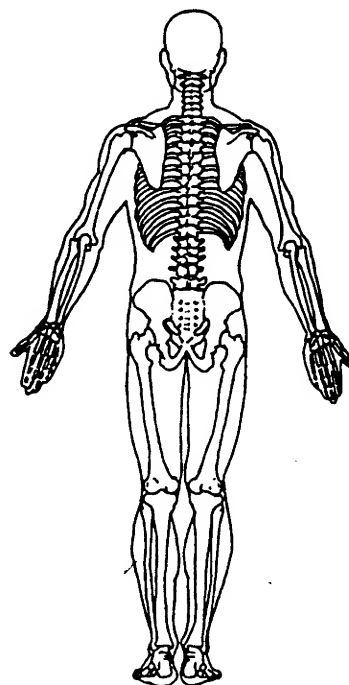
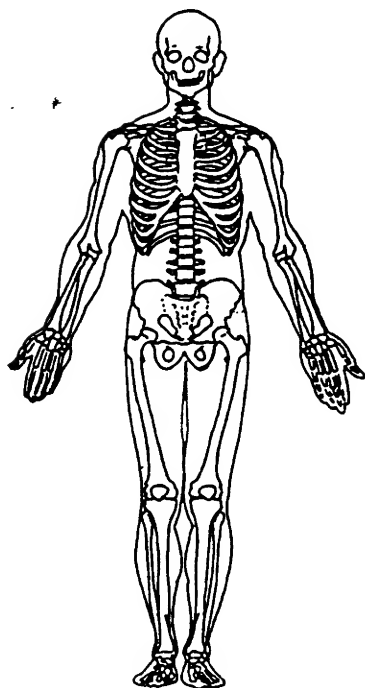
## INJURY DATA FROM INTERVIEWEE(S)

Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s): same person

## SOFT TISSUE/INTERNAL INJURIES

cervical strainThoracic strainminor contusion to ring finger of (L) hand  
air bagsmall abrasion on (R) forearm  
air bag

## SKELETAL INJURIES



The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

1. Primary Sampling Unit Number

NCSI

3. Vehicle Number

01

2. Case Number - Stratum

9304

4. Occupant Number

01

## OCCUPANT INJURY DATA QUESTIONS

1. Were you (Was he/she) injured?

☐ No (If "No", go to next occupant. Stop if no other occupant.)

☒ Yes (If "Yes", complete Occupant Injury Questions)

☐ Unknown

2. Did you (he/she) receive any cuts, abrasions, or bruises?

☐ No (go to question 3)

☒ Yes (If "Yes", record the exact location(s) and size on the manikin(s).)

☐ Unknown

2a. Do you know what caused your (his/her) injury(s)?

☐ No

☒ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)

☐ Unknown

3. Did you (he/she) experience any broken bones?

☒ No (If "No", go to question 4)

☐ Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)

☐ Unknown

3a. Do you know what caused the injury(s)?

☐ No

☐ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)

☐ Unknown

4. Did you (he/she) injure your (his/her) head?

☒ No (If "No", go to question 5)

☐ Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)

☐ Unknown

4a. Do you know what caused the injury(s)?

☐ No

☐ Yes (If "Yes", specify the component(s) on the manikin(s).)

☐ Unknown

5. Were any of your (his/her) internal organs injured?

☒ No (If "No", go to question 6)

☐ Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)

☐ Unknown

5a. Do you know what caused this injury?

☐ No

☐ Yes (If "Yes", specify the component(s) on the manikin(s).)

☐ Unknown

6. Did you (he/she) suffer any joint sprains or muscle strains?

☐ No (If "No", go to question 7)

☒ Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)

☐ Unknown

6a. Do you know what caused the injury(s)?

☒ No

☐ Yes (If "Yes", specify the component(s) on the manikin(s).)

☐ Unknown

7. Did you (he/she) receive treatment for your (his/her) injury(s)?

☐ No (If "No", go to question 8)

☒ Yes (If "Yes", go to question 7a)

7a. Were you (Was he/she) treated by:

☒ Hospital/trauma center? (specify hospital name):

☐ Medical clinic

☐ Out patient surgery? (specify medical facility:)

☐ Paramedics or first aid at the scene?

☐ A doctor in his/her office?

☐ Treated at home?

☐ None of the above, go to question 8.

7b. Were you (Was he/she) treated and released from the emergency room?

☐ No (If "No", go to question 7c.)

☒ Yes (If "Yes", go to question 7e.)

7c. Were you (Was he/she) hospitalized?

☒ No (If "No", give an explanation)

☐ Yes (If "Yes", go to question 7d.)

7d. How many days were you (was he/she) in the hospital?

\_\_\_\_\_ days

1. Primary Sampling Unit Number

NC51

3. Vehicle Number

01

2. Case Number - Stratum

9304

4. Occupant Number

01

## OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment?

☒ No☐ Yes (If "Yes", describe:)

---

☐ Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?

☒ No☐ Yes (If "Yes", mail or present the form for signature.)

8. Have you (he/she) lost any days from work or school (college)?

☐ No☐ Yes (If "Yes", determine the number of days lost) (Specify:)☒ Not working prior to the accident☐ Unknown



## CONTACT LOG

1. PSU Number

NCST

3. Vehicle Number

01

2. Case Number—Stratum

9304

4. Assigned Researcher Number

[REDACTED]

### VEHICLE INSPECTION

### INTERVIEW

Date	Time	ID#	Contact	Manner	Result
<u>[REDACTED] 93</u>	<u>[REDACTED]</u>	<u>[REDACTED]</u>	<u>3</u>	<u>1</u>	<u>9</u>
<u>[REDACTED] 93</u>	<u>[REDACTED]</u>	<u>[REDACTED]</u>	<u>3</u>	<u>2</u>	<u>2</u>
<u>  /  /  </u>	<u>  :  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
<u>  /  /  </u>	<u>  :  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
<u>  /  /  </u>	<u>  :  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
<u>  /  /  </u>	<u>  :  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
<u>  /  /  </u>	<u>  :  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
<u>  /  /  </u>	<u>  :  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
<u>  /  /  </u>	<u>  :  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
<u>  /  /  </u>	<u>  :  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>

### DRIVER INTERVIEW

Date	Time	ID#	Contact	Manner	Result
<u>[REDACTED] 93</u>	<u>11:30</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>10</u>
<u>[REDACTED] 93</u>	<u>18:45</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>10</u>
<u>[REDACTED] 93</u>	<u>07:30</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>10</u>
<u>[REDACTED] 93</u>	<u>12:00</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>10</u>
<u>[REDACTED] 93</u>	<u>09:00</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>10</u>
<u>[REDACTED] 93</u>	<u>20:00</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>13</u>
<u>  /  /  </u>	<u>  :  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>

### OCCUPANT INTERVIEW

Occ. No.	Date	Time	ID#	Contact	Manner	Result
<u>2</u>	<u>[REDACTED] 93</u>	<u>20:00</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>13</u>
<u>3</u>	<u>[REDACTED] 93</u>	<u>20:00</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>13</u>
<u>4</u>	<u>[REDACTED] 93</u>	<u>20:00</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>13</u>
<u>  </u>	<u>  /  /  </u>	<u>  :  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>
<u>  </u>	<u>  /  /  </u>	<u>  :  </u>	<u>  </u>	<u>  </u>	<u>  </u>	<u>  </u>

### CONTACT

- (1) Owner/driver
- (2) Towyard
- (3) Repair facility
- (4) Salvage yard
- (5) Police
- (6) Insurance company
- (7) Attorney
- (8) Other (specify):

### MANNER

- (1) Telephone
- (2) In-person
- (3) Questionnaire
- (4) Other (specify):

### RESULT

- (1) Complete inspection
- (2) Partial inspection
- (3) Refusal
- (4) Vehicle moved to known location
- (5) Vehicle moved to unknown location
- (6) Vehicle located, no permission to inspect
- (7) Vehicle repaired
- (8) No answer/not home
- (9) Other (specify):

### CONTACT

- (0) No interview
- (1) Driver
- (2) Other occupant
- (3) Relative or friend
- (4) Multiple interviewees from above categories

### MANNER

- (0) Vehicle not occupied
- (1) Telephone
- (2) In-person
- (3) Questionnaire
- (4) Other (specify):

### RESULT

- (01) Unable to contact or locate
- (02) Hit and run
- (03) Fatal—surrogate not available
- (04) In intensive care—surrogate not available
- (05) Out-of-state resident
- (06) Refused interview
- (07) Insurance company refusal
- (08) Attorney refusal or litigation
- (09) No return of questionnaire
- (10) Other (specify): Answering Machine
- (11) Return of completed questionnaire
- (12) Partial interview
- (13) Complete interview



[illegible]

National Accident Sampling System-Crashworthiness Data System: Interview Form

1. Primary Sampling Unit Number NCST 3. Vehicle Number 01  
 2. Case Number - Stratum 9304 4. Occupant Number 02

OCCUPANT DATA QUESTIONS SUPPLEMENT

1. Who was the next occupant in your vehicle at the time of the accident?  
 \_\_\_\_\_

2. Occupant Number 2 of 4.

3. Where were you (was this person) sitting? (Circle seating positions)

[21] [12] [13]  
 [31] [22] [23]  
 [32] [33]  
 [ ] Other (specify): \_\_\_\_\_

OCCUPANT CHARACTERISTICS

4. Can I have your (his/her) height, weight, age, and sex?

Height 4' Weight 70 lbs Age 10

Sex: ☒ Male [ ] Female

OCCUPANT POSTURE

5. Can you tell me how you (he/she) was sitting in the vehicle?

normal, upright, back against seat

5a. Can you describe the location of your (his/her) feet just prior to the collision?

hanging over edge - don't touch floor

5b. Can you describe the location of your (his/her) arms?

unknown

5c. Was your (his/her) back resting against the seat back rest?  
 [ ] No (If "No", describe the position) \_\_\_\_\_

☒ Yes  
 [ ] Unknown

5d. Were you (Was he/she)

☒ Sitting upright or  
 [ ] Leaning to left side, or  
 [ ] Leaning to right side?

OCCUPANT EJECTION

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?

☒ No (If "No", go to question 7)  
 [ ] Yes (If "Yes", go to question 6a)  
 [ ] Unknown

6a. Can you remember what part of the vehicle you were (he/she was) thrown out?

[ ] No  
 [ ] Yes (Describe:)  
 \_\_\_\_\_

OCCUPANT RESTRAINT

7. Were you (Was he/she) wearing a seat belt just before the accident?

[ ] No (If "No", go to question 8)  
☒ Yes  
 [ ] Unknown

7a. Were you (Was he/she) wearing the

[ ] Lap belt?  
☒ Lap and Shoulder belt?  
 [ ] Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?

[ ] Across the stomach  
☒ Low on lap  
 [ ] Other (specify): \_\_\_\_\_  
 [ ] Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?

☒ Over the shoulder  
 [ ] Under the arm  
 [ ] Behind the back  
 [ ] Behind the seat  
 [ ] Other (specify): \_\_\_\_\_

7d. Did any part of the belt system break or tear?

☒ No  
 [ ] Yes (If "Yes", describe) \_\_\_\_\_  
 [ ] Unknown

OCCUPANT ENTRAPMENT

8. Were you (Was he/she) trapped in the vehicle?

☒ No  
 [ ] Yes (If "Yes", describe) \_\_\_\_\_

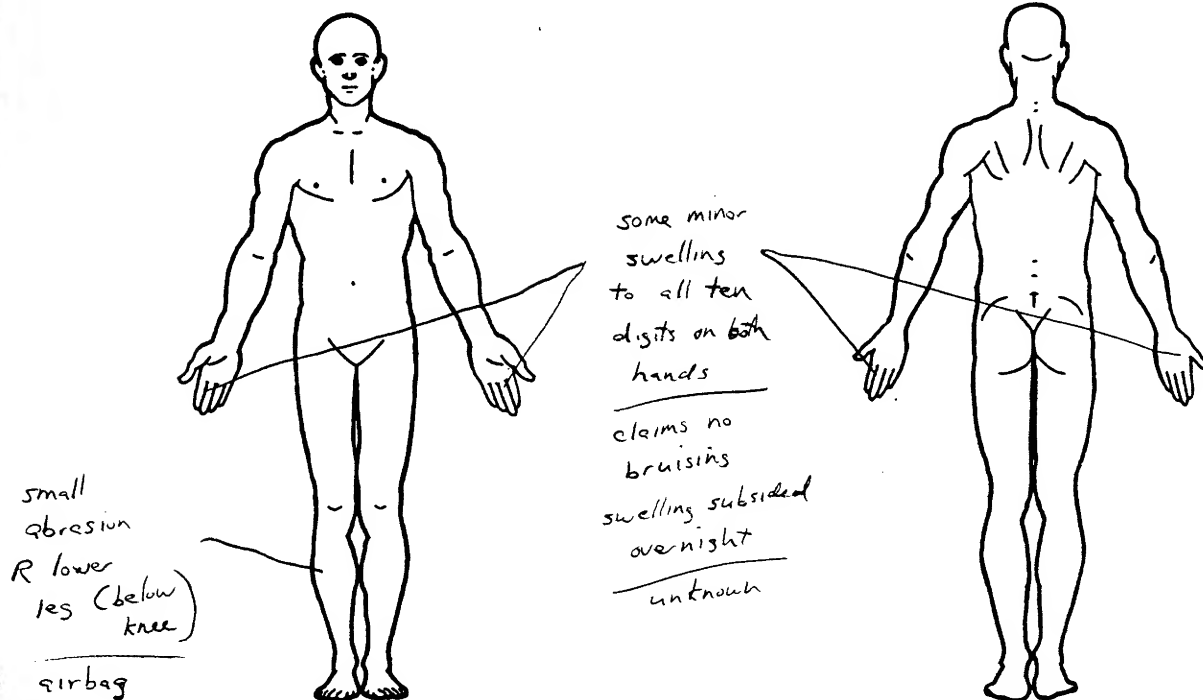
[ ] Unknown

PSU Number NCSTCase Number—Stratum 9304Vehicle Number 01Occupant Number 02

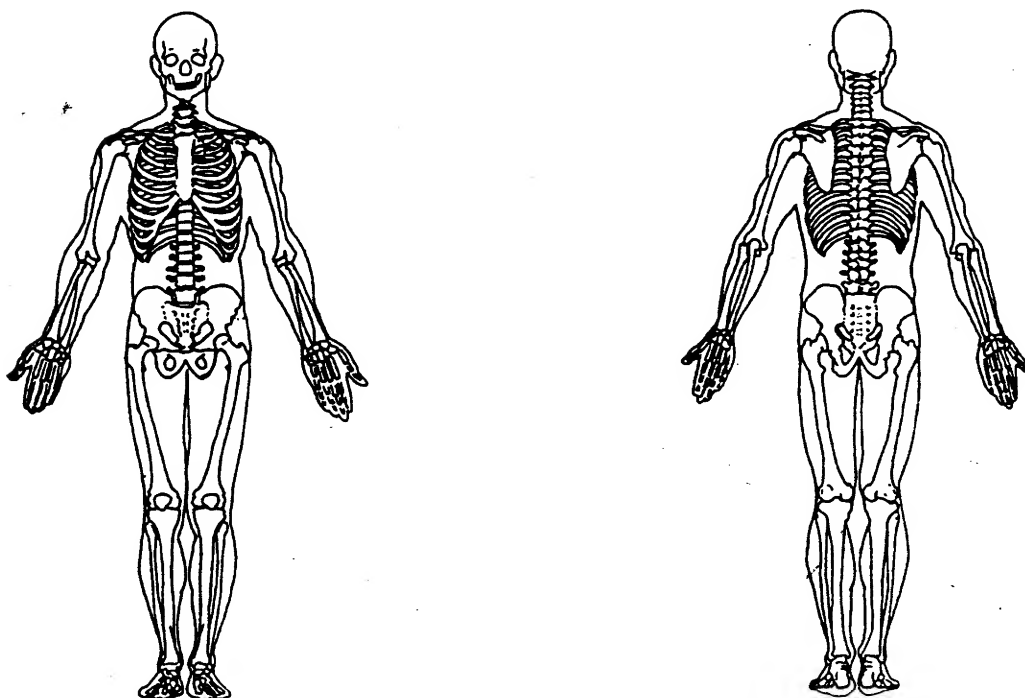
## INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): Driver/Mother

## SOFT TISSUE/INTERNAL INJURIES



## SKELETAL INJURIES



The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

1. Primary Sampling Unit Number NCSI 3. Vehicle Number 01  
2. Case Number - Stratum 9304 4. Occupant Number 02

## OCCUPANT INJURY DATA QUESTIONS

1. Were you (Was he/she) injured?  
☐ No (If "No", go to next occupant. Stop if no other occupant.)  
☒ Yes (If "Yes", complete Occupant Injury Questions)  
☐ Unknown
2. Did you (he/she) receive any cuts, abrasions, or bruises?  
☐ No (go to question 3)  
☒ Yes (If "Yes", record the exact location(s) and size on the manikin(s).)  
☐ Unknown
- 2a. Do you know what caused your (his/her) injury(s)?  
☐ No  
☒ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)  
☐ Unknown
3. Did you (he/she) experience any broken bones?  
☒ No (If "No", go to question 4)  
☐ Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)  
☐ Unknown
- 3a. Do you know what caused the injury(s)?  
☐ No  
☐ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)  
☐ Unknown
4. Did you (he/she) injure your (his/her) head?  
☒ No (If "No", go to question 5)  
☐ Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)  
☐ Unknown
- 4a. Do you know what caused the injury(s)?  
☐ No  
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)  
☐ Unknown
5. Were any of your (his/her) internal organs injured?  
☒ No (If "No", go to question 6)  
☐ Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)  
☐ Unknown
- 5a. Do you know what caused this injury?  
☐ No  
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)  
☐ Unknown
6. Did you (he/she) suffer any joint sprains or muscle strains?  
☒ No (If "No", go to question 7)  
☐ Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)  
☐ Unknown
- 6a. Do you know what caused the injury(s)?  
☐ No  
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)  
☐ Unknown
7. Did you (he/she) receive treatment for your (his/her) injury(s)?  
☒ No (If "No", go to question 8)  
☐ Yes (If "Yes", go to question 7a)
- 7a. Were you (Was he/she) treated by:  
☐ Hospital/trauma center? (specify hospital name):  
☐ Medical clinic  
☐ Out patient surgery? (specify medical facility):  
☐ Paramedics or first aid at the scene?  
☐ A doctor in his/her office?  
☐ Treated at home?  
☐ None of the above, go to question 8.
- 7b. Were you (Was he/she) treated and released from the emergency room?  
☐ No (If "No", go to question 7c.)  
☐ Yes (If "Yes", go to question 7e.)
- 7c. Were you (Was he/she) hospitalized?  
☐ No (If "No", give an explanation)  
☐ Yes (If "Yes", go to question 7d.)  
\_\_\_\_\_  
\_\_\_\_\_
- 7d. How many days were you (was he/she) in the hospital?  
\_\_\_\_\_ days

1. Primary Sampling Unit Number NCST3. Vehicle Number 012. Case Number - Stratum 93044. Occupant Number 02

## OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment?

☒ No☐ Yes (If "Yes", describe:)☐ Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?

☐ No☐ Yes (If "Yes", mail or present the form for signature.)

8. Have you (he/she) lost any days from work or school (college)?

☐ No☐ Yes (If "Yes", determine the number of days lost) (Specify:)☒ Not working prior to the accident☐ Unknown

**National Accident Sampling System-Crashworthiness Data System: Interview Form**

1. Primary Sampling Unit Number NCST 3. Vehicle Number 01  
 2. Case Number - Stratum 9304 4. Occupant Number 03

**OCCUPANT DATA QUESTIONS SUPPLEMENT**

1. Who was the next occupant in your vehicle at the time of the accident?  
 \_\_\_\_\_

2. Occupant Number 3 of 4.

3. Where were you (was this person) sitting? (Circle seating positions)

☒ [21]      [12]      [13]  
              [22]      [23]  
☐ [31]      [32]      [33]  
☐ Other (specify: ) \_\_\_\_\_

**OCCUPANT CHARACTERISTICS**

4. Can I have your (his/her) height, weight, age, and sex?

Height 5'10" Weight 145 Age 14  
 Sex: ☒ Male      ☐ Female

**OCCUPANT POSTURE**

5. Can you tell me how you (he/she) was sitting in the vehicle?

normal; upright

5a. Can you describe the location of your (his/her) feet just prior to the collision?

unknown

5b. Can you describe the location of your (his/her) arms?

unknown

5c. Was your (his/her) back resting against the seat back rest?  
☐ No (If "No", describe the position)

☐ Yes  
☒ Unknown

5d. Were you (Was he/she)

☒ Sitting upright or  
☐ Leaning to left side, or  
☐ Leaning to right side?

**OCCUPANT EJECTION**

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?

☒ No (If "No", go to question 7)  
☐ Yes (If "Yes", go to question 6a)  
☐ Unknown

6a. Can you remember what part of the vehicle you were (he/she was) thrown out?

☐ No  
☐ Yes (Describe: ) \_\_\_\_\_

**OCCUPANT RESTRAINT**

7. Were you (Was he/she) wearing a seat belt just before the accident?

☐ No (If "No", go to question 8)  
☒ Yes  
☐ Unknown

7a. Were you (Was he/she) wearing the

☐ Lap belt?  
☒ Lap and Shoulder belt?  
☐ Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?

☐ Across the stomach  
☒ Low on lap  
☐ Other (specify: ) \_\_\_\_\_  
☐ Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?

☒ Over the shoulder  
☐ Under the arm  
☐ Behind the back  
☐ Behind the seat  
☐ Other (specify: ) \_\_\_\_\_

7d. Did any part of the belt system break or tear?

☒ No  
☐ Yes (If "Yes", describe) \_\_\_\_\_  
☐ Unknown

**OCCUPANT ENTRAPMENT**

8. Were you (Was he/she) trapped in the vehicle?

☒ No  
☐ Yes (If "Yes", describe) \_\_\_\_\_

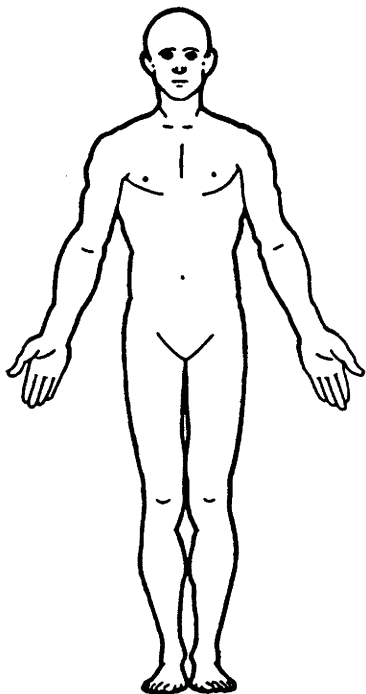
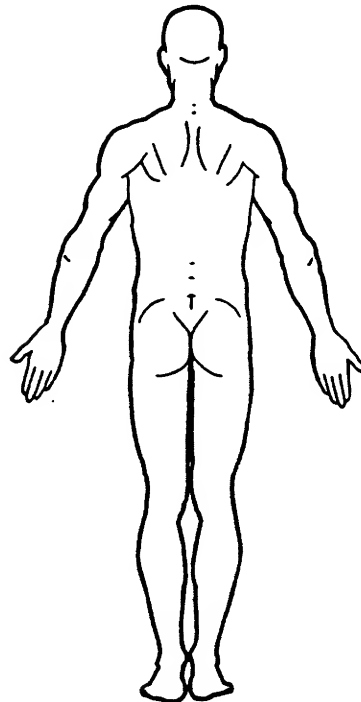
☐ Unknown

PSU Number NCSTCase Number—Stratum 9304Vehicle Number 01Occupant Number 03

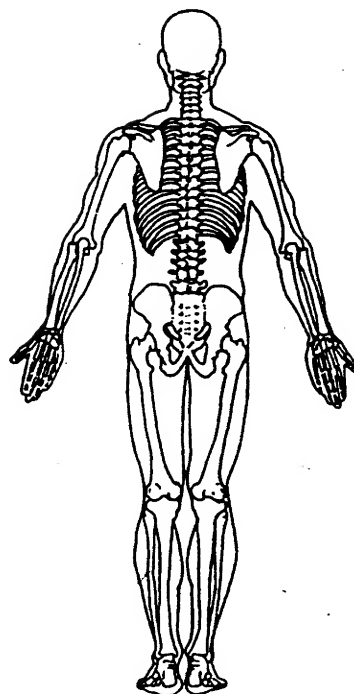
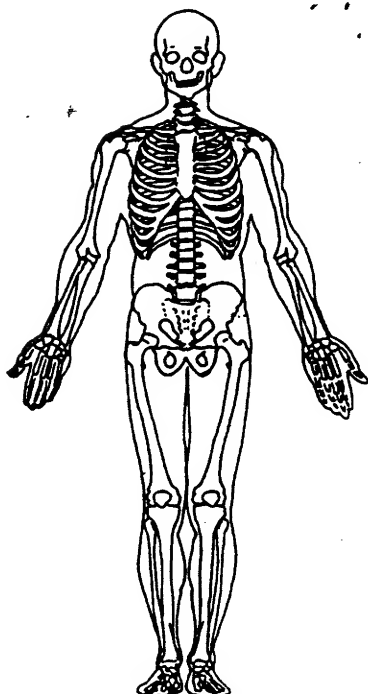
## INJURY DATA FROM INTERVIEWEE(S)

Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): Driver / Mother

## SOFT TISSUE/INTERNAL INJURIES

Not  
Injured

## SKELETAL INJURIES



1. Primary Sampling Unit Number NCSI3. Vehicle Number 012. Case Number - Stratum 93044. Occupant Number 03

## OCCUPANT INJURY DATA QUESTIONS

1. Were you (Was he/she) injured?

- ☒ No (If "No", go to next occupant. Stop if no other occupant.)  
☐ Yes (If "Yes", complete Occupant Injury Questions)  
☐ Unknown

2. Did you (he/she) receive any cuts, abrasions, or bruises?

- ☐ No (go to question 3)  
☐ Yes (If "Yes", record the exact location(s) and size on the manikin(s).)  
☐ Unknown

2a. Do you know what caused your (his/her) injury(s)?

- ☐ No  
☐ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)  
☐ Unknown

3. Did you (he/she) experience any broken bones?

- ☐ No (If "No", go to question 4)  
☐ Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)  
☐ Unknown

3a. Do you know what caused the injury(s)?

- ☐ No  
☐ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)  
☐ Unknown

4. Did you (he/she) injure your (his/her) head?

- ☐ No (If "No", go to question 5)  
☐ Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)  
☐ Unknown

4a. Do you know what caused the injury(s)?

- ☐ No  
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)  
☐ Unknown

5. Were any of your (his/her) internal organs injured?

- ☐ No (If "No", go to question 6)  
☐ Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)  
☐ Unknown

5a. Do you know what caused this injury?

- ☐ No  
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)  
☐ Unknown

6. Did you (he/she) suffer any joint sprains or muscle strains?

- ☐ No (If "No", go to question 7)  
☐ Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)  
☐ Unknown

6a. Do you know what caused the injury(s)?

- ☐ No  
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)  
☐ Unknown

7. Did you (he/she) receive treatment for your (his/her) injury(s)?

- ☒ No (If "No", go to question 8)  
☐ Yes (If "Yes", go to question 7a)

7a. Were you (Was he/she) treated by:

- ☐ Hospital/trauma center? (specify hospital name):  
☐ Medical clinic  
☐ Out patient surgery? (specify medical facility):  
☐ Paramedics or first aid at the scene?  
☐ A doctor in his/her office?  
☐ Treated at home?  
☐ None of the above, go to question 8.

7b. Were you (Was he/she) treated and released from the emergency room?

- ☐ No (If "No", go to question 7c.)  
☐ Yes (If "Yes", go to question 7e.)

7c. Were you (Was he/she) hospitalized?

- ☐ No (If "No", give an explanation)  
☐ Yes (If "Yes", go to question 7d.)

7d. How many days were you (was he/she) in the hospital?  
\_\_\_\_\_ days



1. Primary Sampling Unit Number

NCSI

3. Vehicle Number

01

2. Case Number - Stratum

9304

4. Occupant Number

03

## OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment?

☒ No☐ Yes (If "Yes", describe:)☐ Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?

☐ No☐ Yes (If "Yes", mail or present the form for signature.)

8. Have you (he/she) lost any days from work or school (college)?

☐ No☐ Yes (If "Yes", determine the number of days lost) (Specify:)☐ Not working prior to the accident☐ Unknown

**National Accident Sampling System-Crashworthiness Data System: Interview Form**

1. Primary Sampling Unit Number NCST 3. Vehicle Number 01  
 2. Case Number - Stratum 9304 4. Occupant Number 04

**OCCUPANT DATA QUESTIONS SUPPLEMENT**

1. Who was the next occupant in your vehicle at the time of the accident?  
 \_\_\_\_\_

2. Occupant Number 4 of 4.

3. Where were you (was this person) sitting? (Circle seating positions)

[21] [12] [13]  
 [22] [23]  
 [31] [32] [33]  
☐ Other (specify:)

**OCCUPANT CHARACTERISTICS**

4. Can I have your (his/her) height, weight, age, and sex?

Height 5'7" Weight 150 Age 12

Sex: ☒ Male ☐ Female

**OCCUPANT POSTURE**

5. Can you tell me how you (he/she) was sitting in the vehicle?

normal, upright

5a. Can you describe the location of your (his/her) feet just prior to the collision?

unknown

5b. Can you describe the location of your (his/her) arms?

unknown

5c. Was your (his/her) back resting against the seat back rest?  
☐ No (If "No", describe the position)

☐ Yes  
☒ Unknown

5d. Were you (Was he/she)

☒ Sitting upright or  
☐ Leaning to left side, or  
☐ Leaning to right side?

**OCCUPANT EJECTION**

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?

☒ No (If "No", go to question 7)  
☐ Yes (If "Yes", go to question 6a)  
☐ Unknown

6a. Can you remember what part of the vehicle you were (he/she was) thrown out?

☐ No  
☐ Yes (Describe:)

**OCCUPANT RESTRAINT**

7. Were you (Was he/she) wearing a seat belt just before the accident?

☐ No (If "No", go to question 8)  
☒ Yes  
☐ Unknown

7a. Were you (Was he/she) wearing the

☐ Lap belt?  
☒ Lap and Shoulder belt?  
☐ Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?

☐ Across the stomach  
☒ Low on lap  
☐ Other (specify:)  
☐ Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?

☒ Over the shoulder  
☐ Under the arm  
☐ Behind the back  
☐ Behind the seat  
☐ Other (specify:)

7d. Did any part of the belt system break or tear?

☒ No  
☐ Yes (If "Yes", describe)  
☐ Unknown

**OCCUPANT ENTRAPMENT**

8. Were you (Was he/she) trapped in the vehicle?

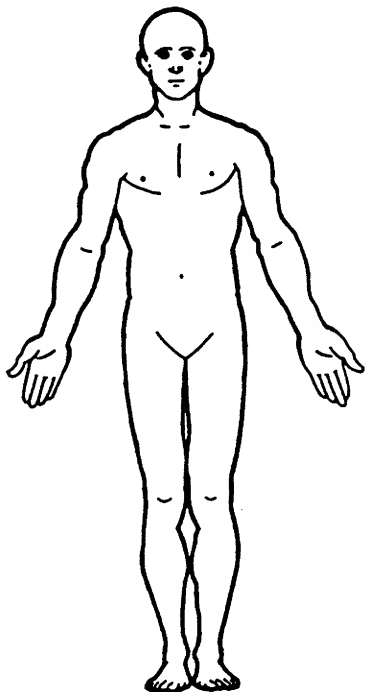
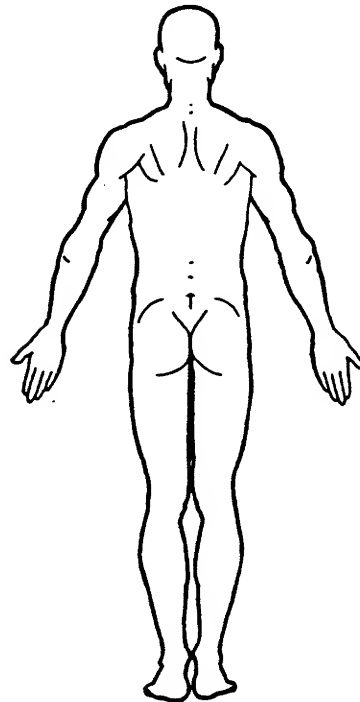
☒ No  
☐ Yes (If "Yes", describe)  
☐ Unknown

PSU Number NCSI Case Number—Stratum 9304 Vehicle Number 01 Occupant Number 04

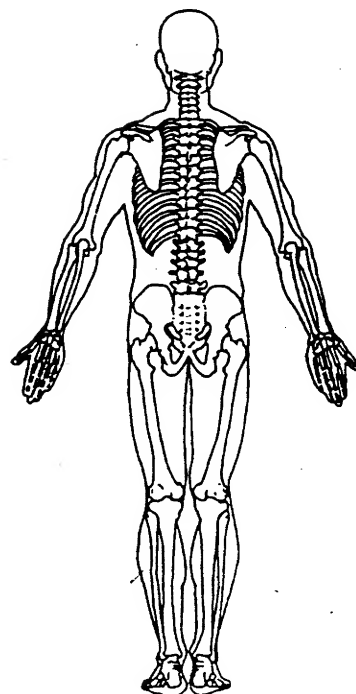
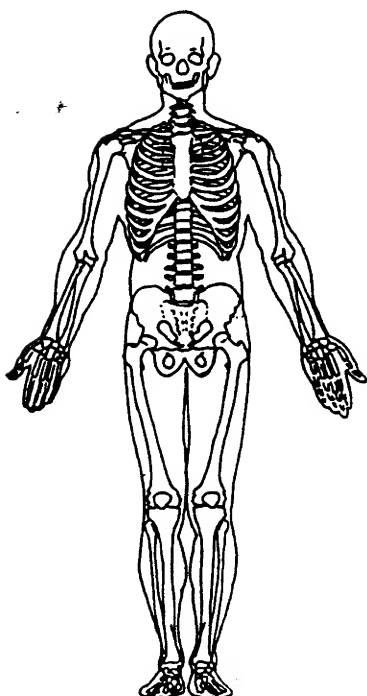
## INJURY DATA FROM INTERVIEWEE(S)

Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s): Driver / Mother

## SOFT TISSUE/INTERNAL INJURIES

*Not  
Injured*

## SKELETAL INJURIES



The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

1. Primary Sampling Unit Number

NC SI

3. Vehicle Number

01

2. Case Number - Stratum

9304

4. Occupant Number

04

## OCCUPANT INJURY DATA QUESTIONS

1. Were you (Was he/she) injured?

- ☒ No (If "No", go to next occupant. Stop if no other occupant.)  
☐ Yes (If "Yes", complete Occupant Injury Questions)  
☐ Unknown

2. Did you (he/she) receive any cuts, abrasions, or bruises?

- ☐ No (go to question 3)  
☐ Yes (If "Yes", record the exact location(s) and size on the manikin(s).)  
☐ Unknown

2a. Do you know what caused your (his/her) injury(s)?

- ☐ No  
☐ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)  
☐ Unknown

3. Did you (he/she) experience any broken bones?

- ☐ No (If "No", go to question 4)  
☐ Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)  
☐ Unknown

3a. Do you know what caused the injury(s)?

- ☐ No  
☐ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)  
☐ Unknown

4. Did you (he/she) injure your (his/her) head?

- ☐ No (If "No", go to question 5)  
☐ Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)  
☐ Unknown

4a. Do you know what caused the injury(s)?

- ☐ No  
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)  
☐ Unknown

5. Were any of your (his/her) internal organs injured?

- ☐ No (If "No", go to question 6)  
☐ Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)  
☐ Unknown

5a. Do you know what caused this injury?

- ☐ No  
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)  
☐ Unknown

6. Did you (he/she) suffer any joint sprains or muscle strains?

- ☐ No (If "No", go to question 7)  
☐ Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)  
☐ Unknown

6a. Do you know what caused the injury(s)?

- ☐ No  
☐ Yes (If "Yes", specify the component(s) on the manikin(s).)  
☐ Unknown

7. Did you (he/she) receive treatment for your (his/her) injury(s)?

- ☒ No (If "No", go to question 8)  
☐ Yes (If "Yes", go to question 7a)

7a. Were you (Was he/she) treated by:

- ☐ Hospital/trauma center? (specify hospital name):  
☐ Medical clinic  
☐ Out patient surgery? (specify medical facility):  
☐ Paramedics or first aid at the scene?  
☐ A doctor in his/her office?  
☐ Treated at home?  
☐ None of the above, go to question 8.

7b. Were you (Was he/she) treated and released from the emergency room?

- ☐ No (If "No", go to question 7c.)  
☐ Yes (If "Yes", go to question 7e.)

7c. Were you (Was he/she) hospitalized?

- ☐ No (If "No"/give an explanation)  
☐ Yes (If "Yes", go to question 7d.)

7d. How many days were you (was he/she) in the hospital?  
\_\_\_\_\_ days

1. Primary Sampling Unit Number

NC 51

3. Vehicle Number

01

2. Case Number - Stratum

9304

4. Occupant Number

04

## OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment?

☒ No☐ Yes (If "Yes", describe:)

---

☐ Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?

☐ No☐ Yes (If "Yes", mail or present the form for signature.)

8. Have you (he/she) lost any days from work or school (college)?

☐ No☐ Yes (If "Yes", determine the number of days lost) (Specify:)☐ Not working prior to the accident☐ Unknown



## GENERAL VEHICLE FORM

1. Primary Sampling Unit Number NC5I  
2. Case Number - Stratum 9304  
3. Vehicle Number 02

## VEHICLE IDENTIFICATION

4. Vehicle Model Year 92  
Code the last two digits of the model year  
(99) Unknown

5. Vehicle Make (specify): Plymouth 09  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

6. Vehicle Model (specify): Sundance 017  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown

7. Body Type 03  
Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number  
3P3XP64 [REDACTED]  
Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros  
Unknown—Code all nine's

## OFFICIAL RECORDS

9. Police Reported Vehicle Disposition 1  
(0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

10. Police Reported Travel Speed 999  
Code to the nearest kph (NOTE: 000 means  
less than 0.5 kph)  
(160) 159.5 kph and above  
(999) Unknown

\_\_\_\_ mph X 1.6093 = \_\_\_\_ kph

11. Police Reported Alcohol Presence 0  
(0) No alcohol present  
(1) Yes (alcohol present)  
(7) Not reported  
(8) No driver present  
(9) Unknown

Note: See variables 37 through 55  
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver 96  
Code actual value (decimal implied  
before first digit—0.xx)  
(95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

Source: PAR

## ACCIDENT RELATED

13. Speed Limit 072  
(000) No statutory limit  
Code posted or statutory speed limit  
in kph  
(999) Unknown

45 mph X 1.6093 = 72 kph

14. Attempted Avoidance Maneuver 01  
(00) No impact  
(01) No avoidance actions  
(02) Braking (no lockup)  
(03) Braking (lockup)  
(04) Braking (lockup unknown)  
(05) Releasing brakes  
(06) Steering left  
(07) Steering right  
(08) Braking and steering left  
(09) Braking and steering right  
(10) Accelerating  
(11) Accelerating and steering left  
(12) Accelerating and steering right  
(97) No driver present  
(98) Other action (specify):  
(99) Unknown

15. Accident Type 98  
Applicable codes may be found on the  
back of page two of this field form  
(00) No impact  
Code the number of the diagram that  
best describes the accident circumstance  
(98) Other accident type (specify):  
(99) Unknown

\*\*\*\* SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 \*\*\*\*

## OCCUPANT RELATED

## 16. Driver Presence in Vehicle

- (0) Driver not present  
(1) Driver present  
(9) Unknown

## 17. Number of Occupants This Vehicle

- (00-96) Code actual number of occupants for this vehicle  
(97) 97 or more  
(99) Unknown

## 18. Number of Occupant Forms Submitted

## VEHICLE WEIGHT ITEMS

## 19. Vehicle Curb Weight

Code weight to nearest  
10 kilograms.

- (045) Less than 450 kilograms  
(610) 6,100 kilograms or more  
(999) Unknown

2,617 lbs X .4536 = 1,187 kgs

Source: MVMA

## 20. Vehicle Cargo Weight

Code weight to nearest  
10 kilograms.

- (000) Less than 5 kilograms  
(450) 4,500 kilograms or more  
(999) Unknown

0 lbs X .4536 = 0 kgs

## RECONSTRUCTION DATA

## 21. Towed Trailing Unit

- (0) No towed unit  
(1) Yes—towed trailing unit  
(9) Unknown

## 22. Documentation of Trajectory Data for This Vehicle

- (0) No  
(1) Yes

## 23. Post Collision Condition of Tree or Pole (For Highest Delta V)

- (0) Not collision (for highest delta V) with tree or pole  
(1) Not damaged  
(2) Cracked/sheared  
(3) Tilted <45 degrees  
(4) Tilted ≥45 degrees  
(5) Uprooted tree  
(6) Separated pole from base  
(7) Pole replaced  
(8) Other (specify):

(9) Unknown

## 24. Rollover

- (0) No rollover (no overturning)

*Rollover (primarily about the longitudinal axis)*

- (1) Rollover, 1 quarter turn only  
(2) Rollover, 2 quarter turns  
(3) Rollover, 3 quarter turns  
(4) Rollover, 4 or more quarter turns (specify):

- (5) Rollover--end-over-end (i.e., primarily about the lateral axis)

- (9) Rollover (overturn), details unknown

## OVERRIDE/UNDERRIDE (THIS VEHICLE)

## 25. Front Override/Underride (this Vehicle)

## 26. Rear Override/Underride (this Vehicle)

- (0) No override/underride, or not an end-to-end impact

*Override (see specific CDC)*

- (1) 1st CDC  
(2) 2nd CDC  
(3) Other not automated CDC (specify):

*Underride (see specific CDC)*

- (4) 1st CDC  
(5) 2nd CDC  
(6) Other not automated CDC (specify):

- (7) Medium/heavy truck or bus override

- (9) Unknown

## HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value

(997) Noncollision

(998) Impact with object

(999) Unknown

## 27. Heading Angle For This Vehicle

## 28. Heading Angle For Other Vehicle

## National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

Page 3

29. Basis for Total Delta V (highest)

6*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

*Delta V Not Calculated*

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

## COMPUTER GENERATED DELTA V

30. Total Delta V

Secondary Highest

999999 Nearest kph30 KPH

(NOTE: 000 means less than  
0.5 kph)  
(160) 159.5 kph and above  
(999) Unknown

31. Longitudinal Component of  
Delta V+  
- 999999 Nearest kph-29 KPH

(NOTE: 000 means greater than  
-0.5 kph and less than +0.5 kph)  
(±160) ±159.5 kph and above  
(999) Unknown

32. Lateral Component of Delta V

Secondary

Highest

+  
- 999999 Nearest kph5 KPH

(NOTE: 000 means greater than  
-0.5 kph and less than +0.5 kph)  
(±160) ±159.5 kph and above  
(999) Unknown

33. Energy Absorption

999 900999 Nearest 100 joules20023

(NOTE: 0000 means less than 50 joules)  
(9997) 999,650 joules or more  
(9999) Unknown

34. Confidence In Reconstruction Program  
Results (For Highest Delta V)

(0) No reconstruction

(1) Collision fits model — results appear  
reasonable

(2) Collision fits model — results appear high

(3) Collision fits model — results appear low

(4) Borderline reconstruction — results appear  
reasonable

*some snagging occurred  
for second highest ΔV*

0

35. Type of Vehicle Inspection

(0) No inspection

(1) Complete inspection

(2) Partial inspection (specify):  
\_\_\_\_\_1

36. Is this an AOPS Vehicle?

(0) No

(1) Yes - researcher determined

(2) VIN determined air bag system

(3) VIN determined automatic (passive) belts

(4) VIN determined air bag and automatic  
(passive) belts1

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [ ] YES [X] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [ ] YES [X] NO



37. Police Reported Other Drug Presence 7

- (0) No other drugs present
- (1) Yes (other drug present)
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Drug Evaluation Classification 0

(DEC) Test For Driver

- (0) No DEC process available or given
- (1) DEC process given, results known
- (2) DEC process given, results unknown
- (3) DEC process available, unknown if given
- (8) No driver present

39. Other Drug Specimen Test Type For Driver 0

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): \_\_\_\_\_
- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

## DRUG EVALUATION CLASSIFICATION

### OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>0</u>	41. <u>0</u>
Depressant Drug	42. <u>0</u>	43. <u>0</u>
Stimulant Drug	44. <u>0</u>	45. <u>0</u>
Hallucinogen Drug	46. <u>0</u>	47. <u>0</u>
Cannabinoid Drug	48. <u>0</u>	49. <u>2</u>
Phencyclidine (PCP)	50. <u>0</u>	51. <u>0</u>
Inhalant Drug	52. <u>0</u>	53. <u>0</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>0</u>	55. <u>0</u>

## Codes For DEC Test Results

- (0) No DEC test given
- (1) Passed DEC test
- (2) Failed DEC test
- (3) DEC test given—results unknown
- (8) No driver present
- (9) Unknown if DEC test given

## Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

## National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

Page 5

## OTHER DATA

56. Driver's Zip Code

- (00000) Driver not present  
 (00001) Driver not a resident of U.S. or territories  
 Code actual 5-digit zip code  
 (99999) Unknown

57. Driver's Race/Ethnic Origin

- (0) Driver not present  
 (1) White (non-Hispanic)  
 (2) Black (non-Hispanic)  
 (3) White (Hispanic)  
 (4) Black (Hispanic)  
 (5) American Indian, Eskimo or Aleut  
 (6) Asian or Pacific Islander  
 (8) Other (specify):

(9) Unknown

58. Vehicle Special Use (This Trip)

- (0) No special use  
 (1) Taxi  
 (2) Vehicle used as school bus  
 (3) Vehicle used as other bus  
 (4) Military  
 (5) Police  
 (6) Ambulance  
 (7) Fire truck or car  
 (8) Other (specify):  
 (9) Unknown

## ROLLOVER DATA

If GV07 (Body Type)  $\neq$  1-49, leave GV59-GV63 blank.  
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
 If GV24 = 9, then GV59-GV63 must equal 9.

59. Rollover Initiation Type

- (0) No rollover  
 (1) Trip-over  
 (2) Flip-over  
 (3) Turn-over  
 (4) Climb-over  
 (5) Fall-over  
 (6) Bounce-over  
 (7) Collision with another vehicle  
 (8) Other rollover initiation type specify):

(9) Unknown rollover initiation type

60. Location of Rollover Initiation

- (0) No rollover  
 (1) On roadway  
 (2) On shoulder—paved  
 (3) On shoulder—unpaved  
 (4) On roadside or divided trafficway median  
 (9) Unknown

61. Rollover Initiation Object Contacted

62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify):  
 (8) Non-contact rollover forces (specify):  
 (9) Unknown

63. Direction of Initial Roll

- (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (5) End-over-end (i.e., primarily about the lateral axis)  
 (9) Unknown roll direction

## PRECRASH DATA

64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight  
 (02) Slowing or stopping in traffic lane  
 (03) Starting in traffic lane  
 (04) Stopped in traffic lane  
 (05) Passing or overtaking another vehicle  
 (06) Disabled or parked in travel lane  
 (07) Leaving a parking position  
 (08) Entering a parking position  
 (09) Turning right  
 (10) Turning left  
 (11) Making a U-turn  
 (12) Backing up (other than for parking position)  
 (13) Negotiating a curve  
 (14) Changing lanes  
 (15) Merging  
 (16) Successful avoidance maneuver to a previous critical event  
 (97) Other (specify):  
 (98) No driver present  
 (99) Unknown

## PRECRASH DATA (Continued)

65. Critical Precrash Event 62*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): \_\_\_\_\_
- (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

*Pedestrian or Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian - unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location

(98) Other critical precrash event (specify): \_\_\_\_\_

(99) Unknown

For Corrective Actions Attempted see variable GV14 (Attempted Avoidance Maneuver)

66. Precrash Stability After Avoidance Maneuver 0

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): \_\_\_\_\_

- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action) 0

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), \*\*\*  
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*  
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



## GENERAL VEHICLE LOG

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

## TO BE COMPLETED BY TEAM

1. PSU Number NCST
2. Case Number—Stratum 9304
3. Researcher Completing Form [Signature]
4. Vehicle Number 02
5. Vehicle Disposition/Type 1
- (1) Towed, CDS applicable
- (2) Non-towed, CDS applicable (not AOPS)
- (3) Non-CDS applicable
- (4) Non-towed AOPS—CDS applicable
6. Reason Vehicle Inspection Not Completed 01
- (00) Non-CDS applicable vehicle
- (01) Complete inspection
- (02) Partial inspection — under repair
- (03) Partial inspection — repair
- (04) Partial inspection — other (specify): \_\_\_\_\_
- (05) Vehicle cannot be located
- (06) Vehicle destroyed
- (07) Vehicle outside of study area
- (08) Vehicle impounded
- (09) Vehicle sold
- (10) Hit and run vehicle
- (11) Owner could not be located
- (12) Owner refusal
- (13) Insurance company refusal
- (14) Attorney refusal or litigation
- (15) Repair or tow facility refusal
- (16) Stolen
- (17) Wrong name and address on PAR
- (18) Caseload / staff turnover
- (19) Other (specify): \_\_\_\_\_
7. Knowledge Of Highest Delta V Results 10
- Known*
- (01) CRASH-PC damage only
- (02) CRASH-PC damage and trajectory
- (03) OLDMISS (completed by Zone Center)
- Unknown*
- (04) Rollover
- (05) Other non-horizontal force
- (06) Sideswipe type damage / severe override
- (07) Vehicle out of scope / pedestrian
- (08) Yielding object
- (09) Overlapping damage
- (10) Insufficient data
- (11) Other (specify): \_\_\_\_\_
- (12) OLDMISS form - pending review by Zone Center
8. Presence Of Non-coded Reconstruction Program? 1
- (0) No
- (1) Yes — *but deemed invalid due to snagging*
9. Data Obtained for This Vehicle's Most Severe Impact (Regardless of Usage) 3
- (0) No data obtained
- (1) CDC data only
- (2) Trajectory data only
- (3) CDC and crush profile only
- (4) CDC and trajectory data only
- (5) CDC, crush profile, and trajectory data

## TO BE COMPLETED BY THE ZONE CENTER

10. Reconstruction Program (Most Severe Impact) \_\_\_\_\_
- (0) Not present
- (1) Added
- (2) Dropped
- (3) Changed
- (4) Correct

11. Reason(s) Program Results Dropped Or Changed
- a. Algorithm choice
- b. Collision type
- c. Vehicle type
- d. Size / stiffness / weight
- e. Improved PDOF
- f. CDC
- g. Trajectory data
- h. Damage data
- i. Heading angle for Oldmiss

a b c d e f g h i

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(Blank) Correct or no reconstruction

(1) Incorrect

## DATA STATUS OF VARIABLE NUMBERS 3-67

3 4 5 6 7 8 9 10 11 12 13

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14 15 16 17 18 19 20 21 22 23 24

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25 26 27 28 29 30 31 32 33 34 35

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36 37 38 39 40 41 42 43 44 45 46

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47 48 49 50 51 52 53 54 55 56 57

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58 59 60 61 62 63 64 65 66 67

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## Data Status Codes:

- (Blank) Correct
- (1) Derived error
- (2) Non-correctable error
- (3) Correctable error
- (4) Change—no error
- (7) Incorrect edit override
- (8) MDE error
- (9) Unknown coded

IF THIS CDS VEHICLE WAS NOT INSPECTED OR IF THIS WAS NOT A CDS VEHICLE,  
DO NOT COMPLETE AN EXTERIOR OR INTERIOR VEHICLE LOG

## EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

1. Primary Sampling Unit Number <u>NC5I</u> 2. Case Number - Stratum <u>9 3 0 4</u>	3. Vehicle Number <u>0 2</u>
--	------------------------------

## VEHICLE IDENTIFICATION

VIN 3 P 3 X P 6 4 K [REDACTED] Model Year 92  
Vehicle Make (specify): Plymouth Vehicle Model (specify): Sundance

## LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
2	Frontal Plane - From LFBC inboard 13 cm	BC to BC
	contact down L side 40 cm rearward of	rear axle
3	R Side BC to BC	R Side BC to BC

### CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

**Measure and document on the vehicle diagram the location of maximum crush.**

**Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.**

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

**Use as many lines/columns as necessary to describe each damage profile.**

[illegible]

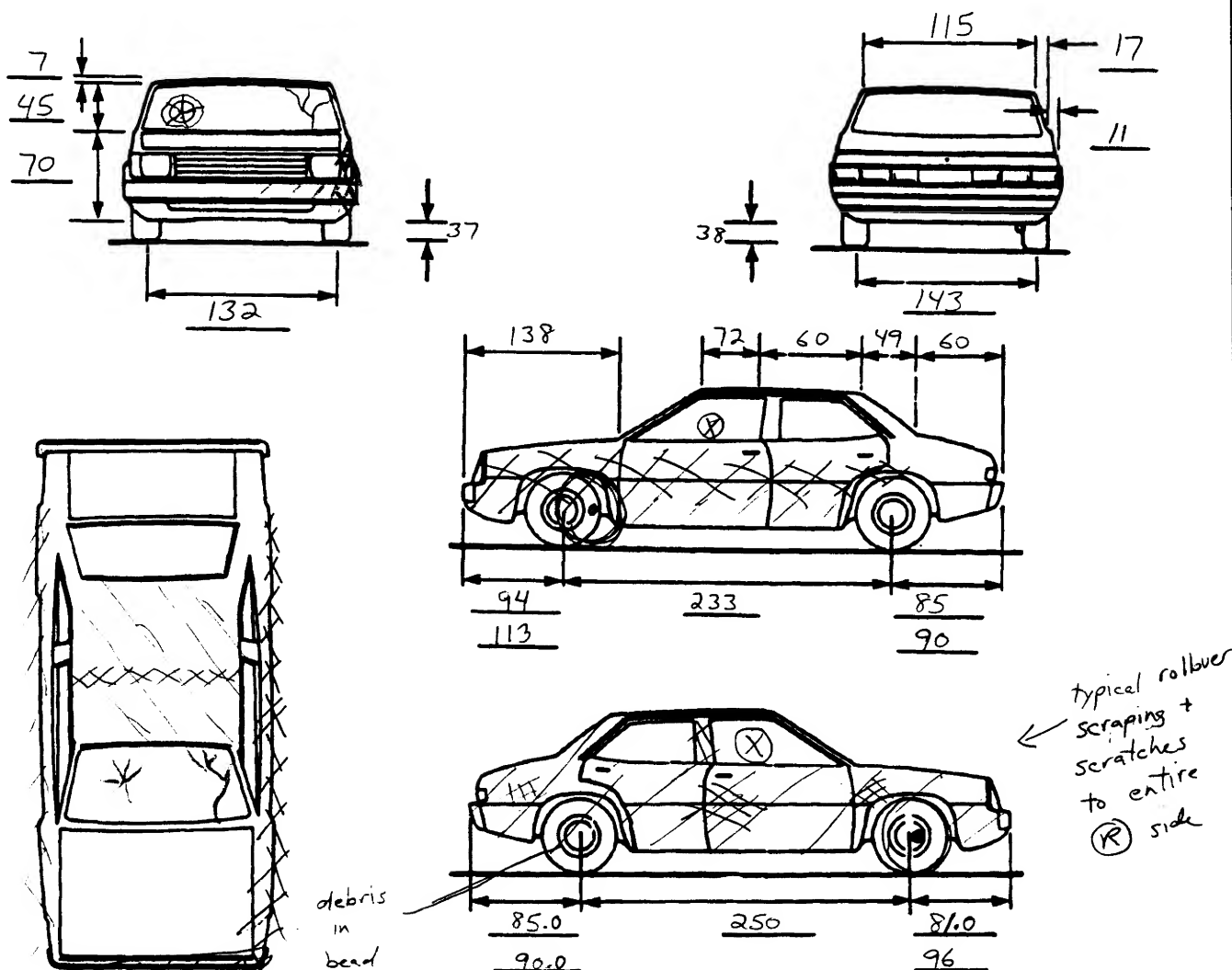
# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>  97.0  </u>	inches	x 2.54 =	<u>  246  </u> cm
Overall Length	<u> 171.7 </u>	inches	x 2.54 =	<u> 436 </u> cm
Maximum Width	<u>  67.3 </u>	inches	x 2.54 =	<u> 171 </u> cm
Curb Weight	<u> 2,617 </u>	pounds	x .4536 =	<u> 1,187 </u> kg
Average Track	<u>  57.4 </u>	inches	x 2.54 =	<u> 146 </u> cm
Front Overhang	<u>    .  </u>	inches	x 2.54 =	<u> 100 </u> cm
Rear Overhang	<u>    .  </u>	inches	x 2.54 =	<u>  90 </u> cm
Undeformed End Width	<u>    .  </u>	inches	x 2.54 =	<u>    </u> cm
Engine Size: cyl./displ.	<u>    .  </u>	cc	x .001 =	<u>    </u> L
<i>I-4</i>	<u>    .  </u>	CID	x .0164 =	<u> 2.2 </u> L

## VEHICLE DAMAGE SKETCH

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted RF <u>2</u> LF <u>1</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>246</u> cm Overall Length <u>436</u> cm Maximum Width <u>171</u> cm Curb Weight <u>1187</u> kg Average Track <u>146</u> cm Front Overhang <u>100</u> cm Rear Overhang <u>90</u> cm Undeformed End Width _____ cm Engine Size: cyl./displ. <u>I-4 2.2</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF $\pm$ _____ ° LF $\pm$ <u>+0.5</u> ° RR $\pm$ _____ ° LR $\pm$ _____ ° Within $\pm$ 5 degrees
<b>TYPE OF TRANSMISSION</b> <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic		<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD Approximate Cargo Weight <u>0</u> kg		

## MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

### CODES FOR OBJECT CONTACTED

[illegible]



## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>02</u>	5. <u>03</u>	6. <u>12</u>	7. <u>F</u>	8. <u>L</u>	9. <u>A</u>	10. <u>E</u>	11. <u>09</u>

## Second Highest Delta "V"

12. <u>03</u>	13. <u>31</u>	14. <u>00</u>	15. <u>R</u>	16. <u>D</u>	17. <u>A</u>	18. <u>Ø</u>	19. <u>02</u>
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## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>±D</u>
<u>141</u>	<u>10</u>	<u>5</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>+ 0</u>

## Second Highest Delta "V"

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>±D</u>
<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>---</u>	<u>+ ---</u>

26. Are CDCs Documented but Not Coded on The Automated File?  
(0) No  
(1) Yes

1

27. Researcher's Assessment of Vehicle Disposition  
(0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

1

28. Original Wheelbase 246  
Code to the nearest centimeter  
(999) Unknown

97 inches X 2.54 = 246 centimeters

29. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

0

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

\_\_\_\_\_  
(Include photograph of CERTIFICATION  
PLACARD in case report)

- (9) Unknown if vehicle is modified

30. Fire Occurrence

0

- (0) No fire

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

31. Origin of Fire

0

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

- (9) Unknown

32. Type of Fuel Tank

1

- (0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS \*\*\*  
(I.E., GV09=0 OR 9 AND GV36=0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



## EXTERIOR VEHICLE LOG

### TO BE COMPLETED BY TEAM

1. PSU Number NCST  
2. Case Number—Stratum 93 04  
3. Researcher Completing Form [REDACTED]  
4. Vehicle Number 02  
5. Date Vehicle Inspected [REDACTED] 1993

13. Number of Coded CDCs (0,1,2)       
14. Number of Coded Crush Profiles (0,1,2)

### TO BE COMPLETED BY ZONE CENTER

6. Applicable Precrash Measurements       
(0) Not applicable  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
7. Impact Damage Documentation       
(0) Not applicable  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
8. Quality Of Vehicle Damage Sketch       
(0) Not applicable (e.g., repaired vehicle)  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
9. Number of Exterior Vehicle Slides
10. Exterior Slides Subject Quality       
(0) Not applicable  
(1) Substandard  
(2) Standard
11. Exterior Slides Quality       
(0) Not applicable  
(1) Substandard  
(2) Standard
12. Primary Error Source (Vehicle Plane)       
(0) No error  
(1) Front  
(2) Side (left or right)  
(3) Back (rear)  
(4) Top  
(5) Undercarriage  
(8) Other (specify):

### DATA STATUS OF VARIABLE NUMBERS 4-32

#### Highest CDC

4 5 6 7 8 9 10 11

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#### Secondary CDC

12 13 14 15 16 17 18 19

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#### Highest Crush Profile

20 21 22

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#### Secondary Crush Profile

23 24 25

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26 27 28 29 30 31 32

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#### Data Status Codes:

- (Blank) Correct  
(1) Derived error  
(2) Non-correctable error  
(3) Correctable error  
(4) Change—no error  
(5) Sequencing error  
(7) Incorrect edit override  
(8) MDE error  
(9) Unknown coded

IF THIS VEHICLE WAS NOT TOWED (I.E., GV09 ≠ 1), DO NOT COMPLETE THE  
INTERIOR VEHICLE LOG



# INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

NCST

2. Case Number - Stratum

9304

3. Vehicle Number

02

## INTEGRITY

4. Passenger Compartment Integrity

06

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 3 6. RF 1 7. LR 0 8. RR 0 9. TG/H 1

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09  $\neq$  2, Then code 0

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

## GLAZING

Glazing Damage from Impact Forces

15. WS 2 16. LF 6 17. RF 6 18. LR 0 19. RR 0

20. BL 0 21. Roof 8 22. Other 8

(0) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(8) No glazing

(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 2 24. LF 0 25. RF 0 26. LR 0 27. RR 0

28. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing

(1) Glazing contacted by occupant but no glazing damage

(2) Glazing in place and cracked by occupant contact

(3) Glazing in place and holed by occupant contact

(4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact

(5) Glazing out-of-place by occupant contact and holed by occupant contact

(6) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

If No Glazing Damage *And* No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS 1 32. LF 2 33. RF 2 34. LR 0 35. RR 0

36. BL 0 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing

(1) AS-1 - Laminated

(2) AS-2 - Tempered

(3) AS-3 - Tempered-tinted

(4) AS-14 - Glass/Plastic

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

39. WS 1 40. LF 2 41. RF 2 42. LR 0 43. RR 0

44. BL 0 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing

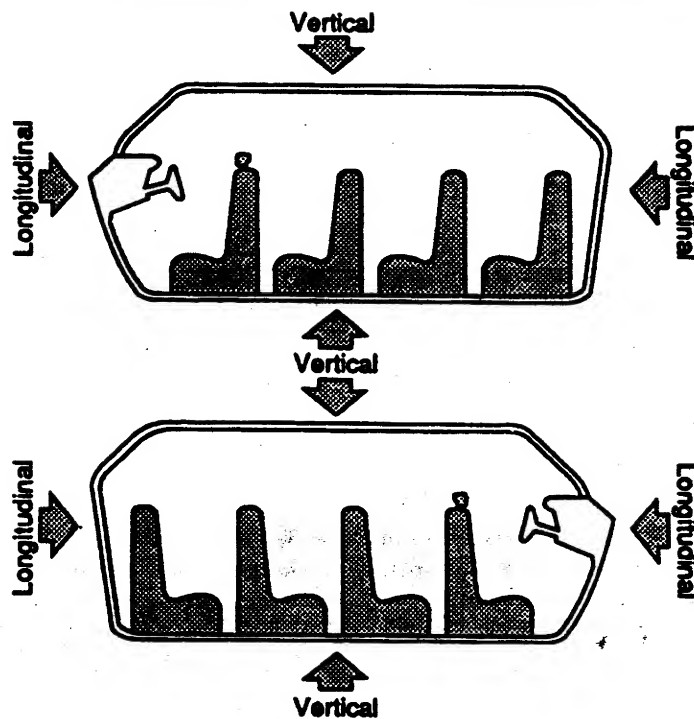
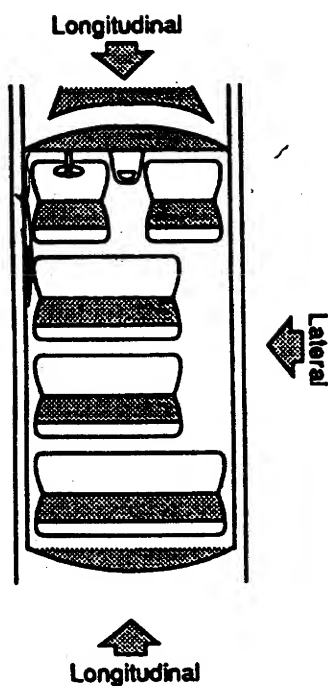
(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(9) Unknown

Row  
Width  
(cm)[illegible]

**Document no more than the 15 most severe intrusions**

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

## INTRUDING COMPONENT

## Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify):

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

## Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify):
- (32) Other exterior object in the environment (specify):
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify):
- (99) Unknown

## LOCATION OF INTRUSION

Front Seat  
 (11) Left  
 (12) Middle  
 (13) Right

Fourth Seat  
 (41) Left  
 (42) Middle  
 (43) Right

Second Seat  
 (21) Left  
 (22) Middle  
 (23) Right

(97) Catastrophic  
 (98) Other enclosed area (specify)

(99) Unknown

Third Seat  
 (31) Left  
 (32) Middle  
 (33) Right

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>21</u>	48. <u>07</u>	49. <u>2</u>	50. <u>3</u>
2nd	51. <u>21</u>	52. <u>10</u>	53. <u>2</u>	54. <u>3</u>
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

## STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
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	—		=	
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No Damage

## National Accident Sampling System-Crashworthiness Data System: Interior Vehicle Form

Page 3

## STEERING COLUMN

87. Steering Column Type 1

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_

(9) Unknown

88. Blank X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

89. Blank X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

90. Blank X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

91. Blank X X X

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

## 92. Steering Rim/Spoke Deformation \_\_\_\_\_

- Code actual measured deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

93. Location of Steering Rim/Spoke Deformation 0 0

Deformation

(00) No steering rim deformation

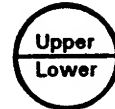
## Quarter Sections

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

## INSTRUMENT PANEL

94. Odometer Reading 0 0 6,000

\_\_\_\_\_ kilometers—Code to the nearest 1,000 kilometers

- (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

12,372 miles X 1.6093 = 5,612 kilometers

Source: Odometer95. Instrument Panel Damage from Occupant Contact? 0

- (0) No  
 (1) Yes  
 (9) Unknown

96. Knee Bolsters Deformed from Occupant Contact? 0

- (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

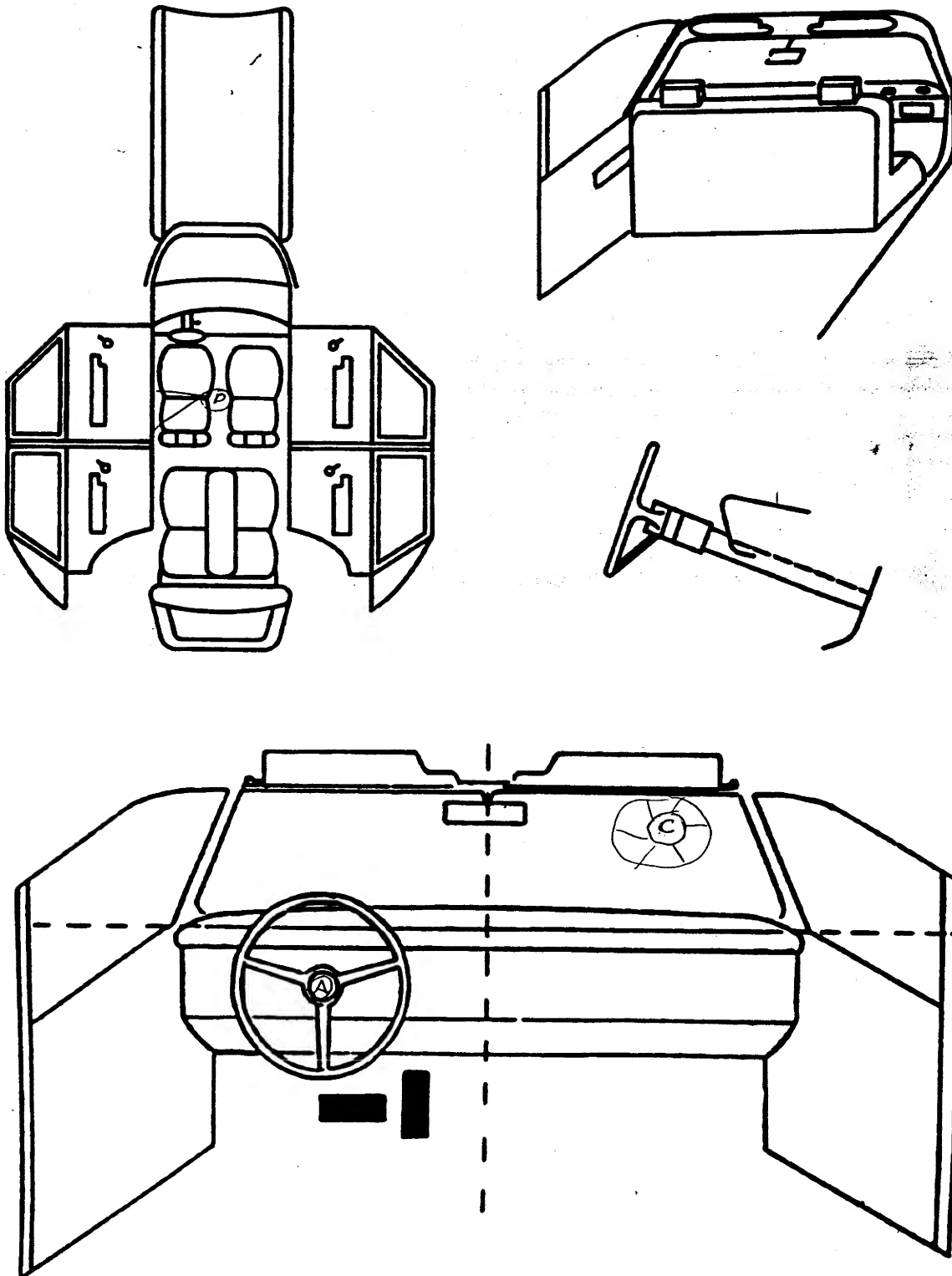
97. Did Glove Compartment Door Open During Collision(s)? 0

- (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown



## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	45	1	Face	lipstick marks (2 separate contacts)	1
B	45	1	Face	1 center of bag - 1 lower/center	1
C	01	1		spider web fx in w/s	3
D	41	1		peening on tab - some stretching	1
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

## CODES FOR INTERIOR COMPONENTS

## FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_
- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_
- (28) Left side window sill

## RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_
- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_
- (38) Right side window sill

## INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

## (46) Other occupants (specify): \_\_\_\_\_

## (47) Interior loose objects

## (48) Child safety seat (specify): \_\_\_\_\_

## (49) Other interior object (specify): \_\_\_\_\_

## ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

## FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

## REAR

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## AUTOMATIC RESTRAINTS

**NOTES:** Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

### AIR BAGS

		Left	Right
F I R S T	Availability/Function	/	○
	Deployment	/	○
	Failure	/	○

#### Air Bag System Availability/Function

- (0) Not equipped/not available  
(1) Air bag

#### Non-functional

- (2) Air bag disconnected (specify):  
\_\_\_\_\_  
(3) Air bag not reinstalled  
(9) Unknown

#### Air Bag System Deployment

- (0) Not equipped/not available  
(1) Air bag deployed during accident (as a result of impact)  
(2) Air bag deployed inadvertently just prior to accident  
(3) Air bag deployed, accident sequence undetermined  
(4) Nondeployed  
(5) Unknown if deployed  
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(9) Unknown

#### Did Air Bag System Fail?

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
\_\_\_\_\_  
(9) Unknown

### AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	○	○
	Use	○	○
	Type	○	○
	Proper Use	○	○
	Failure Modes	○	○

#### Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available  
(1) 2 point automatic belts  
(2) 3 point automatic belts  
(3) Automatic belts - type unknown

#### Non-functional

- (4) Automatic belts destroyed or rendered inoperative  
(9) Unknown

#### Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Automatic belt in use  
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
(3) Automatic belt use unknown  
(9) Unknown

#### Automatic (Passive) Belt System Type

- (0) Not equipped/not available  
(1) Non-motorized system  
(2) Motorized system  
(9) Unknown

#### Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used  
(1) Automatic belt used properly  
(2) Automatic belt used properly with child safety seat

#### Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm  
(4) Automatic shoulder belt worn behind back  
(5) Automatic belt worn around more than one person  
(6) Lap portion of automatic belt worn on abdomen  
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
\_\_\_\_\_  
(8) Other improper use of automatic belt system (specify):  
\_\_\_\_\_  
(9) Unknown

#### Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use  
(1) No automatic belt failure(s)  
(2) Torn webbing (stretched webbing not included)  
(3) Broken buckle or latchplate  
(4) Upper anchorage separated  
(5) Other anchorage separated (specify):  
\_\_\_\_\_  
(6) Broken retractor  
(7) Combination of above (specify):  
(8) Other automatic belt failure (specify):  
\_\_\_\_\_  
(9) Unknown

## MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	⊖	4
	Use	04	00	00
	Failure Modes	1	0	0
SECOND	Availability	4	3	4
	Use	00	00	00
	Failure Modes	0	0	0
THIRD	Availability			
	Use			
	Failure Modes			
OTHER	Availability			
	Use			
	Failure Modes			

**Manual (Active) Belt System Availability**

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

**Integral Belt Partially Destroyed**

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

**Manual (Active) Belt System Use**

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): \_\_\_\_\_
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown

**(08) Other belt used (specify):**

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

**Manual (Active) Belt Failure Modes During Accident**

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_
- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other manual belt failure (specify): \_\_\_\_\_
- (9) Unknown

# CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

## 1. Type of Child Safety Seat

- (0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat  
 (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type  
 (9) Unknown if child safety seat used

## 2. Child Safety Seat Orientation

- (00) No child safety seat  
 Designed for Rear Facing for This Age/Weight  
 (01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify):  
 (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

## 3. Child Safety Seat Harness Usage

## 4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage  
 Note: Options Below Are Used for Variables 3-5.  
 (00) No child safety seat

Not Designed with Harness/Shield/Tether  
 (01) After market harness/shield/tether added, not used

- (02) After market harness/shield/tether used  
 (03) Child safety seat used, but no after market harness/shield/tether added  
 (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether  
 (11) Harness/shield/tether not used  
 (12) Harness/shield/tether used  
 (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether  
 (21) Harness/shield/tether not used  
 (22) Harness/shield/tether used  
 (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

## 6. Child Safety Seat Make/Model (Specify make/model and occupant number)

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## HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	—	3
	Seat Type	02	—	02
	Seat Performance	1	—	0
	Seat Orientation	1	—	0
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	05	05	05
	Seat Performance	0	0	0
	Seat Orientation	0	0	0
THIRD	Head Restraint Type/Damage	/		
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

## Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: \_\_\_\_\_

(9) Unknown \_\_\_\_\_

## Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_

- (10) Box mounted seat (i.e., van type)
- (99) Unknown

## Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

## Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION**      No [☒]      Yes [ ]

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection
- (1) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

**Ejection Area**

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

**(7) Roof**

(8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

**Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

**(5) Integral structure**

(8) Other medium (specify):

(9) Unknown

**Medium Status (Immediately Prior to Impact)**

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

**ENTRAPMENT**      No [☒]      Yes [ ]

Describe entrapment mechanism:

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Component(s):

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(Note in vehicle interior diagram)



## INTERIOR VEHICLE LOG

### TO BE COMPLETED BY TEAM

1. PSU Number NCST
2. Case Number—Stratum 9304
3. Researcher Completing Form [Signature]
4. Vehicle Number 02

### TO BE COMPLETED BY ZONE CENTER

5. Documentation Of Integrity \_\_\_\_\_
6. Documentation Of Glazing \_\_\_\_\_
7. Documentation of Intrusions \_\_\_\_\_
8. Documentation of Steering Column/Wheel \_\_\_\_\_
9. Documentation of Occupant Contacts \_\_\_\_\_
10. Documentation of Restraint Systems \_\_\_\_\_
11. Documentation of Seats \_\_\_\_\_
12. Number of Interior Vehicle Slides \_\_\_\_\_
13. Interior Slides Subject Quality \_\_\_\_\_
14. Interior Slides Quality \_\_\_\_\_

Codes For Log Variables 5-11 and 13-14

- (0) Not applicable
- (1) Substandard - beyond researcher control
- (2) Substandard
- (3) Standard

15. Number of Coded Intrusions \_\_\_\_\_

### DATA STATUS OF VARIABLE NUMBERS 4-97

#### Integrity

4	5	6	7	8	9	10	11	12	13	14

#### Glazing

15	16	17	18	19	20	21	22	23	24	25

26	27	28	29	30	31	32	33	34	35	36

37	38	39	40	41	42	43	44	45	46

#### Intrusion

47	48	49	50	51	52	53	54	55	56	57

58	59	60	61	62	63	64	65	66	67	68

69	70	71	72	73	74	75	76	77	78	79

80	81	82	83	84	85	86

#### Steering Column/Wheel and Instrument Panel

87	88	89	90	91	92	93	94	95	96	97
	XX	XX	XX	XX						

#### Data Status Codes:

- (Blank) Correct
- (1) Derived error
- (2) Non-correctable error
- (3) Correctable error
- (4) Change—no error
- (5) Sequencing error
- (7) Incorrect edit override
- (8) MDE error
- (9) Unknown coded





# OCCUPANT ASSESSMENT FORM

## OCCUPANT'S SEATING

1. Primary Sampling Unit Number NCST  
2. Case Number - Stratum 9304  
3. Vehicle Number 02  
4. Occupant Number 01

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 26  
Code actual age at time of accident.  
(00) Less than one year old (specify by month):  
  
(97) 97 years and older  
(99) Unknown  
  
6. Occupant's Sex 2  
(1) Male  
(2) Female  
(9) Unknown  
  
7. Occupant's Height 173  
Code actual height to the nearest  
centimeter.  
(999) Unknown  
  
68 inches X 2.54 = 172.7 centimeters  
  
8. Occupant's Weight 061  
Code actual weight to the nearest  
kilogram.  
(999) Unknown  
  
138 pounds X .4536 = 61.2 kilograms  
  
9. Occupant's Role 1  
(1) Driver  
(2) Passenger  
(9) Unknown

## 10. Occupant's Seat Position

11

### Front Seat

- (11) Left side  
(12) Middle  
(13) Right side  
(14) Other (specify):  
(15) On or in the lap of another occupant

### Second Seat

- (21) Left side  
(22) Middle  
(23) Right side  
(24) Other (specify):  
(25) On or in the lap of another occupant

### Third Seat

- (31) Left side  
(32) Middle  
(33) Right side  
(34) Other (specify):  
(35) On or in the lap of another occupant

### Fourth Seat

- (41) Left side  
(42) Middle  
(43) Right side  
(44) Other (specify):  
(45) On or in the lap of another occupant

- (97) In or on unenclosed area  
(98) Other seat (specify):  
(99) Unknown

## 11. Occupant's Posture

0

- (0) Normal posture

### Abnormal posture

- (1) Kneeling or standing on seat  
(2) Lying on or across seat  
(3) Kneeling, standing or sitting in front of seat  
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window  
(5) Sitting on a console  
(6) Lying back in a reclined seat position  
(7) Bracing with feet or hands on a surface in front of seat  
(8) Other abnormal posture (specify):  
(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection ☐

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area ☐

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium ☐

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) ☐

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment ☐

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

18. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

(02) Shoulder belt \_\_\_\_\_

(03) Lap belt \_\_\_\_\_

(04) Lap and shoulder belt \_\_\_\_\_

(05) Belt used—type unknown \_\_\_\_\_

(08) Other belt used (specify): \_\_\_\_\_

(12) Shoulder belt used with child safety seat \_\_\_\_\_

(13) Lap belt used with child safety seat \_\_\_\_\_

(14) Lap and shoulder belt used with child safety seat \_\_\_\_\_

(15) Belt used with child safety seat—type unknown \_\_\_\_\_

(18) Other belt used with child safety seat (specify): \_\_\_\_\_

(99) Unknown if belt used \_\_\_\_\_

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Air Bag System Availability/Function 1

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 1

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 1

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown" \_\_\_\_\_

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## 26. Seat Type (this Occupant Position)

02

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

## 27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion  
(specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 0 0 0  
(000) No child safety seat  
Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing  
(950) Built-in child safety seat  
(997) Other make/model (specify):  
\_\_\_\_\_  
(998) Unknown make/model  
(999) Unknown if child safety seat used

29. Type of Child Safety Seat 0  
(0) No child safety seat  
(1) Infant seat  
(2) Toddler seat  
(3) Convertible seat  
(4) Booster seat  
(7) Other type child safety seat (specify):  
\_\_\_\_\_  
(8) Unknown child safety seat type  
(9) Unknown if child safety seat used

30. Child Safety Seat Orientation 0 0  
(00) No child safety seat  
  
*Designed for Rear Facing for This Age/Weight*  
(01) Rear facing  
(02) Forward facing  
(08) Other orientation (specify):  
\_\_\_\_\_  
(09) Unknown orientation

- Designed For Forward Facing for This Age/Weight*  
(11) Rear facing  
(12) Forward facing  
(18) Other orientation (specify):  
\_\_\_\_\_  
(19) Unknown orientation

- Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*  
(21) Rear facing  
(22) Forward facing  
(28) Other orientation (specify):  
\_\_\_\_\_  
(29) Unknown orientation  
(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 0 0  
  
32. Child Safety Seat Shield Usage 0 0  
  
33. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to  
Variables OA31-OA33.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

- (01) After market harness/shield/tether  
added, not used  
(02) After market harness/shield/tether used  
(03) Child safety seat used, but no after market  
harness/shield/tether added  
(09) Unknown if harness/shield/tether  
added or used

*Designed With Harness/Shield/Tether*

- (11) Harness/shield/tether not used  
(12) Harness/shield/tether used  
(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

- (21) Harness/shield/tether not used  
(22) Harness/shield/tether used  
(29) Unknown if harness/shield/tether used  
(99) Unknown if child safety seat used

## INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 3

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):  
\_\_\_\_\_
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 1

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_
- (9) Unknown

37. Hospital Stay 00

- (00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 01

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
  - (61) 61 days or more
  - (62) Fatally injured
  - (97) Not working prior to accident
  - (99) Unknown

**STOP - GO TO VARIABLE 44 ON PAGE 7****VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**39. Time to Death 00

- Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
  - (96) Fatal - ruled disease
  - (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
  - (97) Other result (includes fatal ruled disease) (specify):  
\_\_\_\_\_

## (99) Unknown

43. Number of Recorded Injuries for This Occupant 02

- Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
  - (97) Injured, details unknown
  - (99) Unknown if injured

**AUTOMATIC BELT SYSTEM****44. Automatic (Passive) Belt System Availability/ Function** ☐

- (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

**Non-functional**

- (4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

**45. Automatic (Passive) Belt System Use** ☐

- (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

**46. Automatic (Passive) Belt System Type** ☐

- (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

**47. Proper Use of Automatic (Passive) Belt System** ☐

- (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

**Automatic Belt Used Improperly**

- (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
 (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

**48. Automatic (Passive) Belt Failure Modes During Accident** ☐

- (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

**49. Seat Orientation (this Occupant Position)** ☐

- (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA****50. Glasgow Coma Scale (GCS) Score** ☐ ☒ ☐

- (at Medical Facility)  
 (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

**51. Was the Occupant Given Blood?** ☐ ☒ ☐

- (1) No - blood not given  
 (2) Yes - blood given (specify units):  
 (9) Unknown if blood given

**52. Arterial Blood Gases (ABG) - HCO<sub>3</sub>** ☐ ☒ ☐

- (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?**

NO ☒ YES ☐

**UPDATE CANDIDATE?**

NO ☒ YES ☐



## OCCUPANT ASSESSMENT LOG

### TO BE COMPLETED BY TEAM

1. PSU Number NCST
2. Case Number—Stratum 9304
3. Researcher Completing Form [redacted]
4. Vehicle Number 02
5. Occupant Number 01
6. Interviewer Number [redacted]
7. Date Interview Completed [redacted] 193
8. Date Official Medical Data Requested [redacted] 193
9. Date Official Medical Data Obtained [redacted] 193  
*informed no record of treatment*
10. Occupant's Role 1
  - (1) Driver
  - (2) Passenger
  - (3) Unknown
11. Interviewee For This Occupant 1
  - (0) No interview
  - (1) Same person

*Surrogate*

  - (2) Other occupant
  - (3) Relative or friend
  - (4) Multiple interviewees from above categories (specify): \_\_\_\_\_
12. Manner Of Interview 1
  - (0) No attempt
  - (1) Telephone
  - (2) In-person
  - (3) Questionnaire
  - (9) Unknown (for Zone Center use only)
13. Result Of Last Interview Attempt 13
  - (01) Unable to contact or locate
  - (02) Hit and run
  - (03) Fatal—surrogate not available
  - (04) In intensive care—surrogate not available
  - (05) Out-of-state resident
  - (06) Refused interview
  - (07) Insurance company refusal
  - (08) Attorney refusal or litigation
  - (09) No return of questionnaire
  - (10) Other (specify): \_\_\_\_\_
  - (11) Return of completed questionnaire
  - (12) Partial interview
  - (13) Complete interview

14. Was This Occupant Injured? 1
  - (0) No
  - (1) Yes
  - (9) Unknown
15. Status of Medical Release 1
  - (0) Occupant not injured
  - (1) Medical release not required at medical facility

*Medical Release Required*

  - (2) Required -- not obtained
  - (3) Required -- obtained
16. Injury Treatment Status 05
  - (00) Occupant not injured
  - (01) No treatment
  - (02) Fatal—died before hospitalization
  - (03) Fatal—died after hospitalization
  - (04) Hospitalization
  - (05) Emergency room treatment only
  - (06) Treatment at physician's office
  - (07) Treatment at scene or self treatment
  - (08) Outpatient surgery
  - (09) Treatment at medical facility—unknown level of treatment
  - (99) Unknown
17. Injury Information

	Form Received	Record Status
<i>Official</i>		
a. Autopsy (invasive examination)	___	___
b. Post-ER medical record which includes information about death based on non-invasive examination	___	___
c. Admission record/summary of admission/discharge face sheet	___	___
d. Discharge summary	___	___
e. Operative report	___	___
f. Radiographic record(s) post ER visit	___	___
g. History and physical examination and/or consultation records	___	___
h. Emergency room records	___	<u>01</u>
i. Radiographic record(s) associated with ER visit	___	___
j. Private physician	___	___
<i>Unofficial</i>		
k. Lay coroner	___	___
l. EMS record	___	___
m. Interviewee	___	___
n. Other source (specify): _____	<u>B</u>	___
o. Police report	<u>B</u>	___

(See reverse side of this page for codes for variable 13)

18. Medical Facility Code \_\_\_\_\_



# National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Log

## CODES FOR OCCUPANT ASSESSMENT LOG VARIABLE 16 (INJURY INFORMATION)

### OCCUPANT UPDATE FORM RECEIVED (FIRST COLUMN)

(Blank) No or not applicable

(1) Yes

### STATUS OF MEDICAL RECORD (SECOND COLUMN)

(Blank) Not medically treated/record not required

(01) No record of treatment at medical facility

(02) Medical release required—not obtained

(03) Injury not related to accident

(04) Noncooperative hospital

(05) Hospital out-of-study area

(06) Private physician would not release data

(07) Unknown if medically treated

(08) To be updated

(09) Record not received before file closeout

(10) Record not obtained

(11) Record obtained

(12) Partial record obtained—not to be updated

(13) Partial record obtained—to be updated

## TO BE COMPLETED BY ZONE CENTER

### 18. Documentation of Occupant Interview

(Excludes Injury Data)

(0) Not applicable

(1) Substandard

(2) Standard

### DATA STATUS OF VARIABLE NUMBERS 4-52

4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45	46	47
48	49	50	51	52						

### Data Status Codes:

(Blank) Correct

(1) Derived error

(2) Non-correctable error

(3) Correctable error

(4) Change—no error

(5) Sequencing error

(7) Incorrect edit override

(8) MDE error

(9) Unknown coded



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Administration

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Form Approved  
O.M.B. No. 2127-0021

## OCCUPANT INJURY FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

NCST

3. Vehicle Number

02

2. Case Number - Stratum

9304

4. Occupant Number

01

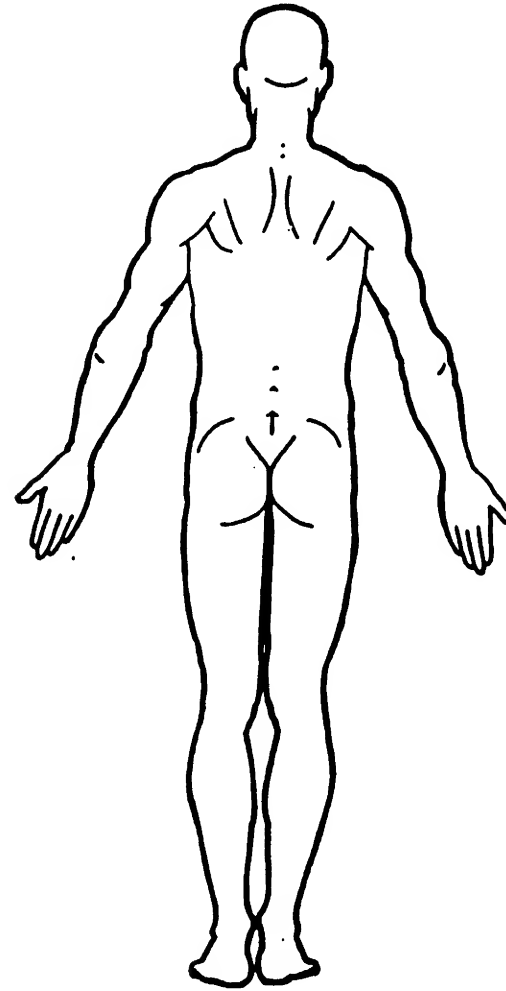
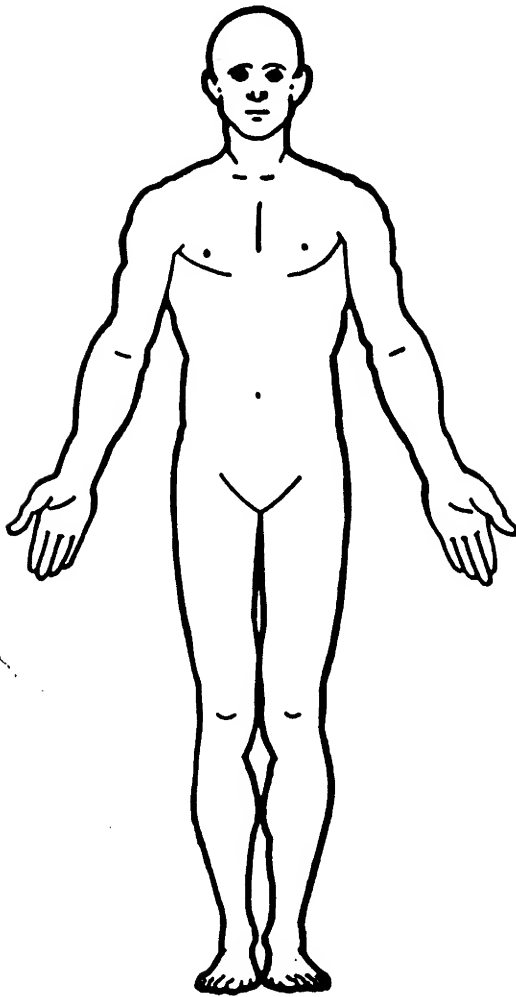
### INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
1st	5. <u>7</u>	6. <u>2</u>	7. <u>9</u>	8. <u>06</u>	9. <u>02</u>	10. <u>1</u>	11. <u>0</u>	12. <u>91</u>	13. <u>1</u>	14. <u>3</u>	15. <u>00</u>
2nd	16. <u>7</u>	17. <u>7</u>	18. <u>9</u>	19. <u>02</u>	20. <u>02</u>	21. <u>1</u>	22. <u>1</u>	23. <u>45</u>	24. <u>1</u>	25. <u>1</u>	26. <u>00</u>
3rd	27. <u>  </u>	28. <u>  </u>	29. <u>  </u>	30. <u>  </u>	31. <u>  </u>	32. <u>  </u>	33. <u>  </u>	34. <u>  </u>	35. <u>  </u>	36. <u>  </u>	37. <u>  </u>
4th	38. <u>  </u>	39. <u>  </u>	40. <u>  </u>	41. <u>  </u>	42. <u>  </u>	43. <u>  </u>	44. <u>  </u>	45. <u>  </u>	46. <u>  </u>	47. <u>  </u>	48. <u>  </u>
5th	49. <u>  </u>	50. <u>  </u>	51. <u>  </u>	52. <u>  </u>	53. <u>  </u>	54. <u>  </u>	55. <u>  </u>	56. <u>  </u>	57. <u>  </u>	58. <u>  </u>	59. <u>  </u>
6th	60. <u>  </u>	61. <u>  </u>	62. <u>  </u>	63. <u>  </u>	64. <u>  </u>	65. <u>  </u>	66. <u>  </u>	67. <u>  </u>	68. <u>  </u>	69. <u>  </u>	70. <u>  </u>
7th	71. <u>  </u>	72. <u>  </u>	73. <u>  </u>	74. <u>  </u>	75. <u>  </u>	76. <u>  </u>	77. <u>  </u>	78. <u>  </u>	79. <u>  </u>	80. <u>  </u>	81. <u>  </u>
8th	82. <u>  </u>	83. <u>  </u>	84. <u>  </u>	85. <u>  </u>	86. <u>  </u>	87. <u>  </u>	88. <u>  </u>	89. <u>  </u>	90. <u>  </u>	91. <u>  </u>	92. <u>  </u>
9th	93. <u>  </u>	94. <u>  </u>	95. <u>  </u>	96. <u>  </u>	97. <u>  </u>	98. <u>  </u>	99. <u>  </u>	100. <u>  </u>	101. <u>  </u>	102. <u>  </u>	103. <u>  </u>
10th	104. <u>  </u>	105. <u>  </u>	106. <u>  </u>	107. <u>  </u>	108. <u>  </u>	109. <u>  </u>	110. <u>  </u>	111. <u>  </u>	112. <u>  </u>	113. <u>  </u>	114. <u>  </u>

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrainted?

\_\_\_ No

\_\_\_ Yes

Blood Alcohol  
Level (mg/dl)

BAL = \_\_\_\_

Glasgow Coma  
Scale Score

GCSS = \_\_\_\_

Units of Blood  
Given

Units = \_\_\_\_

Arterial Blood  
Gases

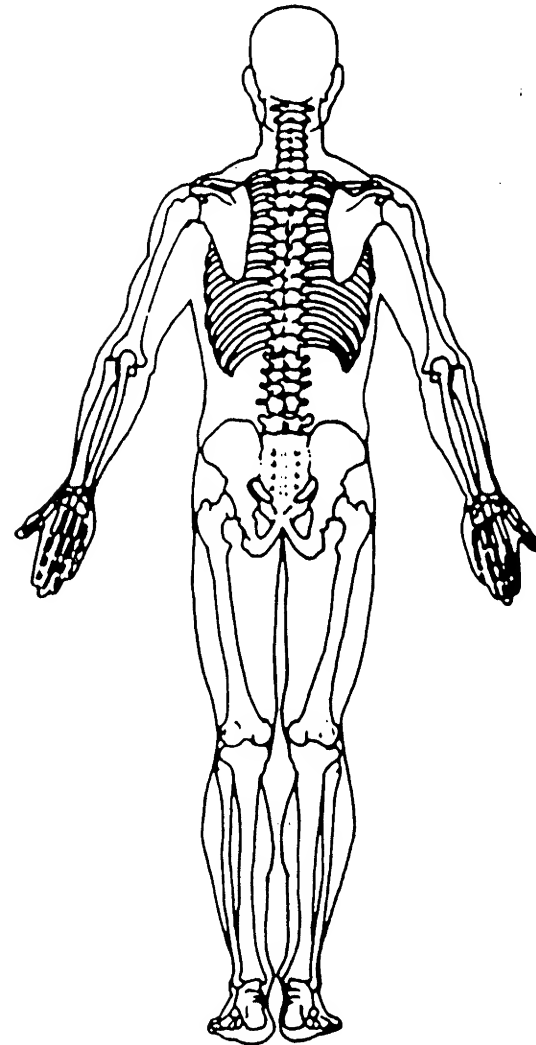
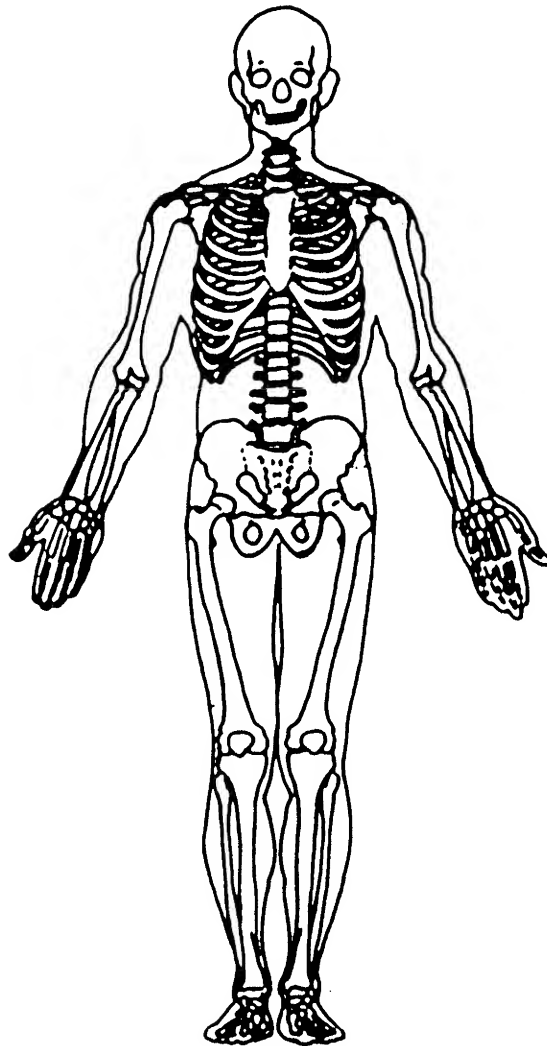
pH = \_\_\_\_

PO<sub>2</sub> = \_\_\_\_

PCO<sub>2</sub> = \_\_\_\_

HCO<sub>3</sub> = \_\_\_\_

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



-S Form 433F (1/93)



U.S. Department of Transportation

National Highway Traffic Safety  
Administration

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## OCCUPANT INJURY LOG

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

TO BE COMPLETED BY ZONE CENTER	SECOND LEVEL REVIEW																																				
<p>1. PSU Number <span style="float: right;">NCST</span></p> <p>2. Case Number - Stratum <span style="float: right;">9304</span></p> <p>3. Vehicle Number <span style="float: right;">2</span></p> <p>4. Occupant Number <span style="float: right;">01</span></p> <p>5. Documentation of Interview Date on Manikin Listing _____ (0) Not applicable (1) Substandard - beyond researcher control (2) Substandard (3) Standard</p>	<p>16. Documentation of Official Data on Manikin _____ (0) Not applicable (1) Substandard - beyond researcher control (2) Substandard (3) Standard</p> <p style="text-align: right;">AIS      AIS 1-7      3-6</p> <p>17. Number of Rows Added by Second Level Reviewer _____</p> <p>18. Number of Rows Deleted by Second Level Reviewer _____</p>																																				
INJURY INFORMATION CODING	ERROR STATUS FOR INJURY VARIABLES																																				
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 50%; text-align: center;">Injury Information</th><th style="width: 50%; text-align: center;">Contact Mechanisms &amp; Intrusions</th></tr></thead><tbody><tr><td>6. Date Data Included With Initial Submission Coded _____</td><td>_____</td></tr><tr><td>7. Coded By (Initials) _____</td><td>_____</td></tr><tr><td>8. Date Update Received _____</td><td>_____</td></tr></tbody></table> <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 50%; text-align: center;">Injury Information</th><th style="width: 50%; text-align: center;">Contact Mechanisms &amp; Intrusions</th></tr></thead><tbody><tr><td>9. Date Data Included With Updated Submission Coded _____</td><td>_____</td></tr><tr><td>10. Coded By (Initials) _____</td><td>_____</td></tr></tbody></table> <p style="text-align: right;">AIS      AIS 1-7      3-6</p> <p>11. Number of Injury Rows Coded _____</p> <p>12. Number of Unknown Injuries _____</p> <p>13. Number of Unknown Injury Contact Mechanisms _____</p>	Injury Information	Contact Mechanisms & Intrusions	6. Date Data Included With Initial Submission Coded _____	_____	7. Coded By (Initials) _____	_____	8. Date Update Received _____	_____	Injury Information	Contact Mechanisms & Intrusions	9. Date Data Included With Updated Submission Coded _____	_____	10. Coded By (Initials) _____	_____	<p>Coding Errors (total number in each column)</p> <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th>5</th><th>6</th><th>7</th><th>8</th><th>9</th><th>10</th><th>11</th><th>12</th><th>13</th><th>14</th><th>15</th></tr></thead><tbody><tr><td style="height: 20px;"></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table> <p>19. Date Of Second Level Review _____ / _____ / _____</p> <p>20. Reviewed By (Initials) _____</p>	5	6	7	8	9	10	11	12	13	14	15											
Injury Information	Contact Mechanisms & Intrusions																																				
6. Date Data Included With Initial Submission Coded _____	_____																																				
7. Coded By (Initials) _____	_____																																				
8. Date Update Received _____	_____																																				
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9. Date Data Included With Updated Submission Coded _____	_____																																				
10. Coded By (Initials) _____	_____																																				
5	6	7	8	9	10	11	12	13	14	15																											
MDE STATUS																																					
<p>14. Date MDE'd _____</p> <p>15. MDE'd By (Initials) _____</p>																																					



## INTERVIEW FORM (A)

1. Primary Sampling Unit Number <u>NC5I</u>	Interviewee(s) Role or Name(s): <u>Driver</u>
2. Case Number - Stratum <u>93 04</u>	
3. Vehicle Number <u>02</u>	

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

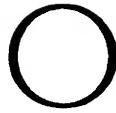
If the driver was not the person interviewed, was an appointment made for a follow-up interview?

### DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

Travelling SB in #1 lane, 25-30 mph - steady pace - not accelerating  
No avoidance maneuvers, other car spun into me, no frontal  
damage to my car, other car hit my left side, air bag went off  
I rotated CCW and rolled over onto right side (soft roll) coming  
to rest against a pole

### OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS

## ACCIDENT DIAGRAM



NORTH

The use of this diagram is optional. It may serve to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.





## INTERVIEW FORM (B)

1. Primary Sampling Unit Number NCSI  
2. Case Number - Stratum 9 3 0 4  
3. Vehicle Number 02

Interviewee(s) Role or Name(s): \_\_\_\_\_

Driver

### ACCIDENT DATA QUESTIONS

1. Can you tell me in which direction you were traveling?

☐ North ☒ South ☐ East ☐ West

(Optional - Where were you coming from or going to?  
going home from work

2. In which lane were you traveling?

(Note: Lane 1 is designated as the right curb lane.)

☒ [1] ☐ [2] ☐ [3] ☐ [4] ☐ Other (specify): \_\_\_\_\_

3. Can you remember your estimated travel speed (in miles per hour) before the accident?

☐ Stopped ☐ 1-10 ☐ 10-20  
☒ 20-30 ☐ 30-40 ☐ 40-50  
☐ 50-60 ☐ 60-70 ☐ 70+

4. Just before the accident, can you tell me what you were intending to do or were doing?

☒ Going straight ☐ Stopped  
☐ slowing ☐ Accelerating  
☐ Turning left ☐ Turning right  
☐ Changing lanes to left ☐ Changing lanes to right  
☐ Backing  
☐ Other (specify): \_\_\_\_\_

5. Did you experience any loss of control due to weather conditions or mechanical problems?

☒ No  
☐ Yes (If yes, describe below)  
\_\_\_\_\_  
\_\_\_\_\_

6. Did you have to take any avoidance actions prior to the accident?

☒ No - Go to question 7  
☐ Yes - Go to question 6a

6a. What actions did you take?

☐ Braking with lock-up  
☐ Braking without lock-up  
☐ Releasing brakes  
☐ Accelerating  
☐ Steering left  
☐ Steering right  
☐ Other (specify): \_\_\_\_\_

7. Where was your vehicle at the time of the collision?

☒ Original travel lane ☐ Different travel lane  
☐ In intersection ☐ Off roadway to right  
☐ Off roadway to left  
☐ Other (specify): \_\_\_\_\_

8. Was your travel speed at the time of the collision different from your previous travel speed?

☒ No  
☐ Lower  
☐ higher  
☐ Unknown

8a. Can you estimate your speed at the time of the collision?

☐ Stopped ☐ 1-10 ☐ 10-20  
☒ 20-30 ☐ 30-40 ☐ 40-50  
☐ 50-60 ☐ 60-70 ☐ 70+

9. Immediately following the collision, can you describe how your vehicle moved to its stopped position?

rotated CCW about 90 degrees  
rolled up onto right side - off road  
against a pole

10. Can you tell me how many collisions your vehicle had during the accident and the source of the collisions?

1 - other car vs. my Left side  
2 - Right side of my car (rollover)  
3 - Top of my car - hit pole (barely)

1. Primary Sampling Unit Number

NCST

3. Vehicle Number

02

2. Case Number - Stratum

9304

4. Occupant Number

01

## VEHICLE/DRIVER DATA QUESTIONS

1. Can you tell me the year, make, model of your vehicle?

1986, Plymouth, Sundance  
 Year Make Model

2. Can you describe the damage to your vehicle?

all left side + all right side  
damaged

3. Was there any previous damage to your vehicle that is not related to this accident?

☒ No☐ Yes (If "yes", describe below)

4. Did any of the doors (hatch, tailgate) open during the accident?

☒ No☐ Yes (If "Yes", describe below)

5. Did any of the windows break during the accident?

☐ No☒ Yes (If "Yes", describe below)

LF and RF windows shattered  
W/S cracked

6. Does your vehicle have a glove compartment?

☐ No☒ Yes

6a. Did the glove compartment door come open during the accident?

☒ No☐ Yes☐ Unknown

7. Does your vehicle have "seat belts"?

☐ No (If "No", go to question 7b)☒ Yes (If "Yes", go to question 7a)

7a. Can you describe the type of seat belt for each seat?

Driver's seat ☐ Lap ☒ Lap and shoulderFront seat middle ☐ Lap ☐ Lap and shoulderFront seat right ☐ Lap ☒ Lap and shoulderRear seat left ☐ Lap ☒ Lap and shoulderRear seat middle ☒ Lap ☐ Lap and shoulderRear seat right ☐ Lap ☒ Lap and shoulder

(Identify seat belts for third row and beyond)

7b. Were any of the belts removed or not functional prior to the accident?

☒ No☐ Yes (If "Yes", specify which belt and describe problem)

8. Do any of the front belts move along a motorized track when the door is opened or closed?

☒ No (If "No", go to question 9)☐ Yes (If "Yes", what seat location?)☐ Left Front☐ Right Front

8a. Were the motorized belts working properly before the accident?

☐ No (If "No", describe condition below)☐ Yes

8b. Were the belts connected to the track prior to the accident?

☐ No☐ Yes☐ Unknown

9. Do any of the front "seat" belts attach to the door such that when the door is opened the belt travels with the door?

☒ No (go to question 10)☐ Yes

9a. Does this belt come across the \_\_\_\_\_?

☐ Chest only☐ Lap and chest

9b. Was this belt connected prior to the accident?

☐ No☐ Yes☐ Unknown

## AIR BAGS

10. Is your vehicle equipped with a driver's side air bag?

☐ No (go to question 11)☒ Yes (go to question 10a)☐ Unknown (go to question 11)

10a. Did the air bag inflate during the accident?

☐ No (go to questions 10b and 10c)☒ Yes (go to question 10e)

1. Primary Sampling Unit Number

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## VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)

10b. Was the air bag wiring disconnected prior to the accident?

☐ No☐ Yes (If "Yes", describe previous condition)☐ Unknown

10c. Was your vehicle involved in any accidents prior to this accident which inflated the air bag?

☐ No (go to question 11)☐ Yes (go to question 10d)☐ Unknown

10d. Was the air bag re-installed after the accident?

☐ No (go to question 11)☐ Yes☐ Unknown

10e. Did the air bag inflate as you expected?

☐ No (If "No" describe below)☒ Yes☐ Unknown

11. Is your vehicle equipped with a passenger side air bag?

☒ No (If "No", go to question 12)☐ Yes (If "Yes", go to question 11a)☐ Unknown (If "Unknown", go to question 12)

11a. Did the passenger air bag inflate during the accident?

☐ No (go to question 11b)☐ Yes (go to question 12)

11b. Was the passenger air bag wiring disconnected prior to the accident?

☐ No☐ Yes (If "Yes", describe below)☐ Unknown

11c. Was the passenger air bag inflated in a previous accident?

☐ No (go to question 12)☐ Yes (go to question 11d)☐ Unknown

11d. Was the passenger air bag re-installed after the accident?

☐ No (go to question 12)☐ Yes☐ Unknown

11e. Did the passenger air bag inflate as you expected?

☐ No (If "No" describe below)☐ Yes☐ Unknown

## CHILD SAFETY SEAT

12. Was there a person in a child safety seat in your vehicle?

☒ No (If "No", go to question 13)☐ Yes☐ Unknown

12a. Can you tell me the manufacturer and model of the child safety seat?

12b. Can you describe the type of child safety seat?

☐ Infant☐ Toddler☐ Convertible☐ Booster☐ Other (specify): \_\_\_\_\_☐ Unknown

12c. Where was the child safety seat(s) located?

☐ [12] ☐ [13]☐ [21] ☐ [22] ☐ [23]☐ [31] ☐ [32] ☐ [33]☐ [Other] (specify): \_\_\_\_\_

12d. Can you tell me which direction the child safety seat was facing prior to the accident?

☐ Rear facing☐ Forward facing,☐ Other (specify): \_\_\_\_\_☐ Unknown

12e. Was a seat belt used to hold the child seat in place?

☐ No (If "No", go to question 12g)☐ Yes (If "Yes", go to question 12f)☐ Unknown

12f. Can you describe how the seat belt was secured to the child seat?

☐ Looped through designated rear framing struts?☐ Looped through arm rest slots?☐ Belt across safety shield?☐ Looped through rear frame outside the designated framing struts?☐ Other (specify): \_\_\_\_\_☐ Unknown

12g. What was the child safety seat equipped with at the time of purchase? (check all that apply)

☐ Harness☐ Shield☐ Tether strap

If any box is checked, ask questions 12h - 12i.

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## VEHICLE/DRIVER DATA QUESTIONS (CONTINUED)

12h. Were any of these items added after you owned the child safety seat?

☐ Yes

(specify \_\_\_\_\_)

☐ No☐ Unknown

12i. Were any of these items used during the accident?

☐ Yes (If "Yes", check all that apply)☐ Harness☐ Shield☐ Tether strap)☐ No☐ Unknown

## OPTIONAL

If you do not know where the vehicle is or if the owner's permission is needed for inspection.

15. Do you know where the vehicle is currently located?

\_\_\_\_\_  
\_\_\_\_\_

16. May I take a look at your vehicle to assess the damage?

☐ No☐ Yes

## CARGO WEIGHT AND MILEAGE

13. Was there any cargo in your vehicle?

☒ No (If "No", go to question 14)☐ Yes (If "Yes", go to question 13a)☐ Unknown

13a. Can you estimate the weight of the cargo?

\_\_\_\_\_ lbs.

Cargo description  
\_\_\_\_\_  
\_\_\_\_\_

14. Can you tell me the mileage on the vehicle?

about 12,000 miles

## DRIVER ONLY

17. What race do you consider yourself?

☒ White☐ Black☐ American Indian, Eskimo or Aleut, Asian or Pacific Islander☐ Other (specify: \_\_\_\_\_)☐ Unknown.

18. Are you of hispanic origin?

☒ No☐ Yes

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## OCCUPANT DATA QUESTIONS

1. Was there anyone else in your vehicle at the time of the accident?

☒ No (If "No", go to question 4)☐ Yes (If "Yes", specify number in question 2 below and then go to question 3)☐ Unknown

2. How many?

☐ 1 One other person☐ 2 Two other persons☐ 3 Three other persons☐ 4 Four other persons☐ 5 Five other persons☐ 6 Six other persons☐ 7 Seven or more other persons  
(specify number:)

3. Where was this person sitting? (Circle seating positions)

	[12]	[13]
[21]	[22]	[23]
[31]	[32]	[33]
<input type="checkbox"/> Other (specify:)		

## OCCUPANT CHARACTERISTICS

4. Can I have your (his/her) height, weight, age, and sex?

Height 5'8 Weight 138 Age 26Sex: ☐ Male ☒ Female

## OCCUPANT POSTURE

5. Can you tell me how you (he/she was) were sitting in your vehicle?

normal, upright, behind wheel

5a. Can you describe the location of your (his/her) feet just prior to the collision?

right foot on gasleft foot flat on floor

5b. Can you describe the location of your (his/her) arms?

both hands on wheel

5c. Was your (his/her) back resting against the seat back rest?

☐ No (If "No", describe the position)☒ Yes☐ Unknown

5d. Were you (Was he/she)

☒ Sitting upright or☐ Leaning to left side, or☐ Leaning to right side?

## OCCUPANT EJECTION

6. Were you (Was he/she) or any part of your (his/her) body thrown from the vehicle during the accident?

☒ No (If "No", go to question 7)☐ Yes (If "Yes", go to question 6a)☐ Unknown

6a. Can you remember what part of the vehicle you were (he/she was) thrown out?

☐ No☐ Yes (Describe:)

## OCCUPANT RESTRAINT

7. Were you (Was he/she) wearing a seat belt just before the accident?

☐ No (If "No", go to question 8)☒ Yes☐ Unknown

7a. Were you (Was he/she) wearing the

☐ Lap belt?☒ Lap and Shoulder belt?☐ Shoulder belt?

7b. Can you describe how you were (he/she was) wearing the lap belt?

☐ Across the stomach☒ Low on lap☐ Other (specify:)☐ Unknown

7c. Can you describe how you were (he/she was) wearing the shoulder belt?

☒ Over the shoulder☐ Under the arm☐ Behind the back☐ Behind the seat☐ Other (specify:)

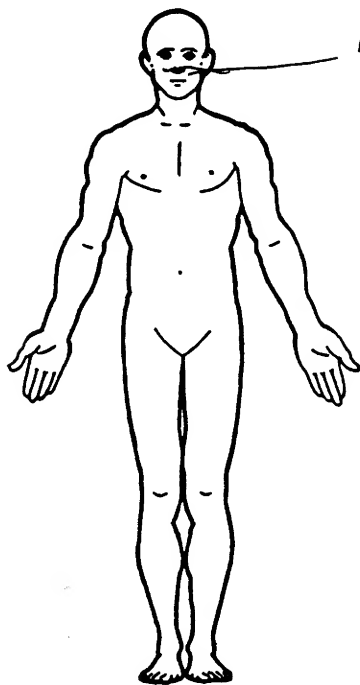
7d. Did any part of the belt system break or tear?

☒ No☐ Yes (If "Yes", describe)☐ Unknown

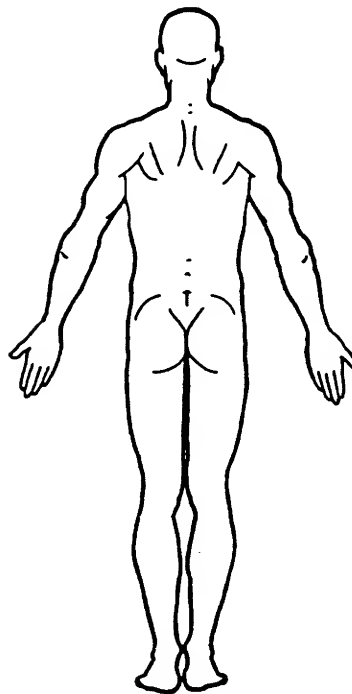
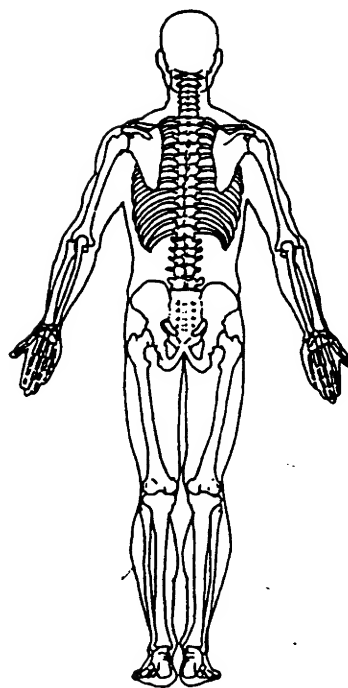
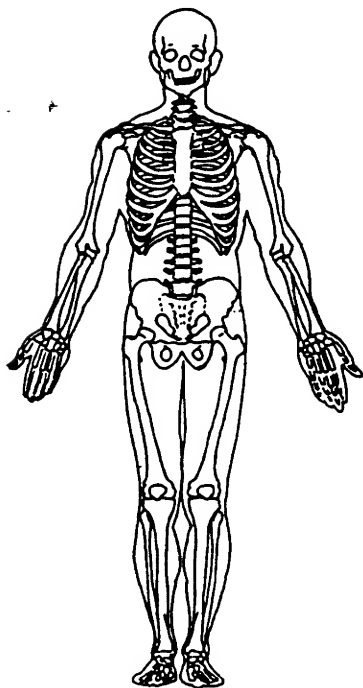
## OCCUPANT ENTRAPMENT

8. Were you (Was he/she) trapped in the vehicle?

☒ No☐ Yes (If "Yes", describe)☐ Unknown

PSU Number NCSTCase Number—Stratum 9304Vehicle Number 02Occupant Number 01**INJURY DATA FROM INTERVIEWEE(S)**Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): Driver / same person**SOFT TISSUE/INTERNAL INJURIES**

multiple  
small lacerations  
over entire  
facial area  
no stitches  
none in hairline  
flying glass

**SKELETAL INJURIES**

The space provided on the back of this page may be used to document injuries noted by the interviewee(s).

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NCSI

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01

## OCCUPANT INJURY DATA QUESTIONS

1. Were you (Was he/she) injured?

- ☐ No (If "No", go to next occupant. Stop if no other occupant.)
- ☒ Yes (If "Yes", complete Occupant Injury Questions)
- ☐ Unknown

2. Did you (he/she) receive any cuts, abrasions, or bruises?

- ☐ No (go to question 3)
- ☒ Yes (If "Yes", record the exact location(s) and size on the manikin(s).)
- ☐ Unknown

2a. Do you know what caused your (his/her) injury(s)?

- ☐ No
- ☒ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)
- ☐ Unknown

3. Did you (he/she) experience any broken bones?

- ☒ No (If "No", go to question 4)
- ☐ Yes (If "Yes", record the exact location(s) and type of fracture(s) on the manikin(s), and then go to question 3a.)
- ☐ Unknown

3a. Do you know what caused the injury(s)?

- ☐ No
- ☐ Yes (If "Yes", specify the component(s) or object(s) on the manikin(s).)
- ☐ Unknown

4. Did you (he/she) injure your (his/her) head?

- ☒ No (If "No", go to question 5)
- ☐ Yes (If "Yes", describe the type of injury(s) on the manikin(s), then go to question 4a.)
- ☐ Unknown

4a. Do you know what caused the injury(s)?

- ☐ No
- ☐ Yes (If "Yes", specify the component(s) on the manikin(s).)
- ☐ Unknown

5. Were any of your (his/her) internal organs injured?

- ☒ No (If "No", go to question 6)
- ☐ Yes (If "Yes", thoroughly describe the type of injury(s) and specify the internal organ(s) injured on the manikin(s), and then go to question 5a.)
- ☐ Unknown

5a. Do you know what caused this injury?

- ☐ No
- ☐ Yes (If "Yes", specify the component(s) on the manikin(s).)
- ☐ Unknown

6. Did you (he/she) suffer any joint sprains or muscle strains?

- ☒ No (If "No", go to question 7)
- ☐ Yes (If "Yes", specify on the manikin(s), and then go to question 6a.)
- ☐ Unknown

6a. Do you know what caused the injury(s)?

- ☐ No
- ☐ Yes (If "Yes", specify the component(s) on the manikin(s).)
- ☐ Unknown

7. Did you (he/she) receive treatment for your (his/her) injury(s)?

- ☐ No (If "No", go to question 8)
- ☒ Yes (If "Yes", go to question 7a)

7a. Were you (Was he/she) treated by:

- ☒ Hospital/trauma center? (specify hospital name):  
[REDACTED]
- ☐ Medical clinic
- ☐ Out patient surgery? (specify medical facility):  
\_\_\_\_\_
- ☐ Paramedics or first aid at the scene?
- ☐ A doctor in his/her office?
- ☐ Treated at home?
- ☐ None of the above, go to question 8.

7b. Were you (Was he/she) treated and released from the emergency room?

- ☐ No (If "No", go to question 7c.)
- ☒ Yes (If "Yes", go to question 7e.)

7c. Were you (Was he/she) hospitalized?

- ☒ No (If "No", give an explanation)
- ☐ Yes (If "Yes", go to question 7d.)
- \_\_\_\_\_
- \_\_\_\_\_

7d. How many days were you (was he/she) in the hospital?  
\_\_\_\_\_ days

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## OCCUPANT INJURY DATA QUESTIONS (CONTINUED)

7e. Have you (Has he/she) received any follow-up treatment?

☒ No☐ Yes (If "Yes", describe:)

---

☐ Unknown

7f. In order to achieve the best possible scientific data regarding your (his/her) injury(s), we need to obtain a copy of your (his/her) medical reports. Would you (he/she) sign a medical release form?

☐ No☐ Yes (If "Yes", mail or present the form for signature.)

*Not requested as Providence had already indicated that no release would be required*

8. Have you (he/she) lost any days from work or school (college)?

☐ No☒ Yes (If "Yes", determine the number of days lost) (Specify: 1)☐ Not working prior to the accident☐ Unknown





## CONTACT LOG

1. PSU Number

NCSI

3. Vehicle Number

02

2. Case Number—Stratum

9304

4. Assigned Researcher Number

[REDACTED]

### VEHICLE INSPECTION

Date	Time	ID#	Contact	Manner	Result
<u>[REDACTED] 93</u>	<u>[REDACTED]</u>	<u>[REDACTED]</u>	<u>2</u>	<u>1</u>	<u>9</u>
<u>[REDACTED] 93</u>	<u>[REDACTED]</u>	<u>[REDACTED]</u>	<u>4</u>	<u>2</u>	<u>1</u>
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### CONTACT

- (1) Owner/driver
- (2) Towyard
- (3) Repair facility
- (4) Salvage yard
- (5) Police
- (6) Insurance company
- (7) Attorney
- (8) Other (specify):  
\_\_\_\_\_

### MANNER

- (1) Telephone
- (2) In-person
- (3) Questionnaire
- (4) Other (specify):  
\_\_\_\_\_

### RESULT

- (1) Complete inspection
- (2) Partial inspection
- (3) Refusal
- (4) Vehicle moved to known location
- (5) Vehicle moved to unknown location
- (6) Vehicle located, no permission to inspect
- (7) Vehicle repaired
- (8) No answer/not home
- (9) Other (specify):  
\_\_\_\_\_

### INTERVIEW

#### DRIVER INTERVIEW

Date	Time	ID#	Contact	Manner	Result
<u>[REDACTED] 93</u>	<u>[REDACTED]</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>10</u>
<u>[REDACTED] 93</u>	<u>[REDACTED]</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>10</u>
<u>[REDACTED] 93</u>	<u>[REDACTED]</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>10</u>
<u>[REDACTED] 93</u>	<u>[REDACTED]</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>10</u>
<u>[REDACTED] 93</u>	<u>[REDACTED]</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>10</u>
<u>[REDACTED] 93</u>	<u>[REDACTED]</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>10</u>
<u>[REDACTED] 93</u>	<u>[REDACTED]</u>	<u>[REDACTED]</u>	<u>1</u>	<u>1</u>	<u>10</u>

#### OCCUPANT INTERVIEW

Occ. No.	Date	Time	ID#	Contact	Manner	Result
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### CONTACT

- (0) No interview
- (1) Driver
- (2) Other occupant
- (3) Relative or friend
- (4) Multiple interviewees from above categories

### MANNER

- (0) Vehicle not occupied
- (1) Telephone
- (2) In-person
- (3) Questionnaire
- (4) Other (specify): \_\_\_\_\_

### RESULT

- (01) Unable to contact or locate
- (02) Hit and run
- (03) Fatal—surrogate not available
- (04) In intensive care—surrogate not available
- (05) Out-of-state resident
- (06) Refused interview
- (07) Insurance company refusal
- (08) Attorney refusal or litigation
- (09) No return of questionnaire
- (10) Other (specify): Answers Machine
- (11) Return of completed questionnaire
- (12) Partial interview
- (13) Complete interview





## GENERAL VEHICLE FORM

1. Primary Sampling Unit Number NCST  
2. Case Number - Stratum 9304  
3. Vehicle Number 03

### VEHICLE IDENTIFICATION

4. Vehicle Model Year 86  
Code the last two digits of the model year  
(99) Unknown
5. Vehicle Make (specify): Buick 18  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown
6. Vehicle Model (specify): Century 007  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(999) Unknown
7. Body Type 04  
Note: Applicable codes may be found on  
the back of this page.
8. Vehicle Identification Number 1G4AL19R  
Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros  
Unknown—Code all nine's

### OFFICIAL RECORDS

9. Police Reported Vehicle Disposition 1  
(0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown
10. Police Reported Travel Speed 999  
Code to the nearest kph (NOTE: 000 means  
less than 0.5 kph)  
(160) 159.5 kph and above  
(999) Unknown  
     mph X 1.6093 =      kph

11. Police Reported Alcohol Presence 0  
(0) No alcohol present  
(1) Yes (alcohol present)  
(7) Not reported  
(8) No driver present  
(9) Unknown

Note: See variables 37 through 55  
(Page 4) for information on Other Drugs

12. Alcohol Test Result For Driver 96  
Code actual value (decimal implied  
before first digit—0.xx)  
(95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

Source: PAR

### ACCIDENT RELATED

13. Speed Limit 072  
(000) No statutory limit  
Code posted or statutory speed limit  
in kph  
(999) Unknown  
45 mph X 1.6093 = 72 kph
14. Attempted Avoidance Maneuver 99  
(00) No impact  
(01) No avoidance actions  
(02) Braking (no lockup)  
(03) Braking (lockup)  
(04) Braking (lockup unknown)  
(05) Releasing brakes  
(06) Steering left  
(07) Steering right  
(08) Braking and steering left  
(09) Braking and steering right  
(10) Accelerating  
(11) Accelerating and steering left  
(12) Accelerating and steering right  
(97) No driver present  
(98) Other action (specify):  
(99) Unknown
15. Accident Type 68  
Applicable codes may be found on the  
back of page two of this field form  
(00) No impact  
Code the number of the diagram that  
best describes the accident circumstance  
(98) Other accident type (specify):  
(99) Unknown

\*\*\*\* SKIP TO VARIABLE GV37 IF GV07 DOES NOT EQUAL 01-49 \*\*\*\*

## OCCUPANT RELATED

6. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown
17. Number of Occupants This Vehicle 01  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
18. Number of Occupant Forms Submitted 01

## VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 1,220  
 Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown  
2,690 lbs X .4536 = 1,220 kgs  
 Source: [REDACTED]
20. Vehicle Cargo Weight 999  
 Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown  
 \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

## RECONSTRUCTION DATA

21. Towed Trailing Unit 0  
 (0) No towed unit  
 (1) Yes—towed trailing unit  
 (9) Unknown
22. Documentation of Trajectory Data for This Vehicle 0  
 (0) No  
 (1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0  
 (0) Not collision (for highest delta V) with tree or pole  
 (1) Not damaged  
 (2) Cracked/sheared  
 (3) Tilted <45 degrees  
 (4) Tilted ≥45 degrees  
 (5) Uprooted tree  
 (6) Separated pole from base  
 (7) Pole replaced  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

24. Rollover 0  
 (0) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
 (1) Rollover, 1 quarter turn only  
 (2) Rollover, 2 quarter turns  
 (3) Rollover, 3 quarter turns  
 (4) Rollover, 4 or more quarter turns (specify): \_\_\_\_\_  
 (5) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (9) Rollover (overturn), details unknown

## OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 0
26. Rear Override/Underride (this Vehicle) 0  
 (0) No override/underride, or not an end-to-end impact  
*Override (see specific CDC)*  
 (1) 1st CDC  
 (2) 2nd CDC  
 (3) Other not automated CDC (specify): \_\_\_\_\_  
*Underride (see specific CDC)*  
 (4) 1st CDC  
 (5) 2nd CDC  
 (6) Other not automated CDC (specify): \_\_\_\_\_  
 (7) Medium/heavy truck or bus override  
 (9) Unknown

## HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

- Values: (000)-(359) Code actual value  
 (997) Noncollision  
 (998) Impact with object  
 (999) Unknown
27. Heading Angle For This Vehicle 106
28. Heading Angle For Other Vehicle 000

29. Basis for Total Delta V (highest)

6*Delta V Calculated*

- (1) CRASH program—damage only routine
- (2) CRASH program—damage and trajectory routine
- (3) Missing vehicle algorithm

*Delta V Not Calculated*

- (4) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.
- (5) All vehicles within scope (CDC applicable) of CRASH program but one of the collision conditions is beyond the scope of the CRASH program or other acceptable reconstruction technique, regardless of adequacy of damage data.
- (6) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available.

**COMPUTER GENERATED DELTA V**

30. Total Delta V

Secondary Highest

9 9 99 Nearest kph29

(NOTE: 000 means less than  
0.5 kph)  
(160) 159.5 kph and above  
(999) Unknown

31. Longitudinal Component of  
Delta V+  
- 9 9 9-18 Nearest kph

(NOTE: 000 means greater than  
-0.5 kph and less than +0.5 kph)  
(±160) ±159.5 kph and above  
(999) Unknown

32. Lateral Component of Delta V

Secondary Highest

+  
- 9 9 922 Nearest kph

(NOTE: 000 means greater than  
-0.5 kph and less than +0.5 kph)  
(±160) ±159.5 kph and above  
(999) Unknown

33. Energy Absorption

9 9 9 . 9 0 093229 Nearest 100 joules

(NOTE: 0000 means less than 50 joules)  
(9997) 999,650 joules or more  
(9999) Unknown

34. Confidence In Reconstruction Program  
Results (For Highest Delta V)

- (0) No reconstruction
- (1) Collision fits model — results appear reasonable
- (2) Collision fits model — results appear high
- (3) Collision fits model — results appear low
- (4) Borderline reconstruction — results appear reasonable

0

35. Type of Vehicle Inspection

- (0) No inspection
- (1) Complete inspection
- (2) Partial inspection (specify):

1

36. Is this an AOPS Vehicle?

- (0) No
- (1) Yes - researcher determined
- (2) VIN determined air bag system
- (3) VIN determined automatic (passive) belts
- (4) VIN determined air bag and automatic (passive) belts

1

IS OLDMISS APPLICABLE FOR THIS VEHICLE? [ ] YES [X] NO

IF YES: IS A COMPLETED OLDMISS PROGRAM SUMMARY INCLUDED? [ ] YES [X] NO

37. Police Reported Other Drug Presence 7

- (0) No other drugs present
- (1) Yes (other drug present)
- (7) Not reported
- (8) No driver present
- (9) Unknown

38. Police Reported Drug Evaluation Classification (DEC) Test For Driver 0

- (0) No DEC process available or given
- (1) DEC process given, results known
- (2) DEC process given, results unknown
- (3) DEC process available, unknown if given
- (8) No driver present

39. Other Drug Specimen Test Type For Driver 0

- (0) No specimen test given
- (1) Blood test
- (2) Urine test
- (3) Other specimen tests (specify): \_\_\_\_\_
- (7) Unspecified specimen test
- (8) No driver present
- (9) Unknown if specimen test given

### DRUG EVALUATION CLASSIFICATION

#### OTHER DRUGS TEST RESULTS FOR DRIVER

	DEC Test Results	Specimen Test Results
Narcotic Drug	40. <u>0</u>	41. <u>0</u>
Depressant Drug	42. <u>0</u>	43. <u>0</u>
Stimulant Drug	44. <u>0</u>	45. <u>0</u>
Hallucinogen Drug	46. <u>0</u>	47. <u>0</u>
Cannabinoid Drug	48. <u>0</u>	49. <u>0</u>
Phencyclidine (PCP)	50. <u>0</u>	51. <u>0</u>
Inhalant Drug	52. <u>0</u>	53. <u>0</u>
Other Drug (Excluding Nicotine, Aspirin, Alcohol, Drugs Administered Post-Crash)	54. <u>0</u>	55. <u>0</u>

## Codes For DEC Test Results

- (0) No DEC test given
- (1) Passed DEC test
- (2) Failed DEC test
- (3) DEC test given—results unknown
- (8) No driver present
- (9) Unknown if DEC test given

## Codes for Specimen Test Results

- (0) No specimen test given
- (1) Drug not found in specimen
- (2) Drug found in specimen
- (7) Specimen test given, results unknown or not obtained
- (8) No driver present
- (9) Unknown if specimen test given

## National Accident Sampling System-Crashworthiness Data System: General Vehicle Form

Page 5

## OTHER DATA

## 56. Driver's Zip Code

- (00000) Driver not present  
 (00001) Driver not a resident of U.S. or territories  
           Code actual 5-digit zip code  
 (99999) Unknown

## 57. Driver's Race/Ethnic Origin

- (0) Driver not present  
 (1) White (non-Hispanic)  
 (2) Black (non-Hispanic)  
 (3) White (Hispanic)  
 (4) Black (Hispanic)  
 (5) American Indian, Eskimo or Aleut  
 (6) Asian or Pacific Islander  
 (8) Other (specify):  
 (9) Unknown

## 58. Vehicle Special Use (This Trip)

- (0) No special use  
 (1) Taxi  
 (2) Vehicle used as school bus  
 (3) Vehicle used as other bus  
 (4) Military  
 (5) Police  
 (6) Ambulance  
 (7) Fire truck or car  
 (8) Other (specify):  
 (9) Unknown

## ROLLOVER DATA

If GV07 (Body Type)  $\neq$  1-49, leave GV59-GV63 blank.  
 If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
 If GV24 = 9, then GV59-GV63 must equal 9.

## 59. Rollover Initiation Type

- (0) No rollover  
 (1) Trip-over  
 (2) Flip-over  
 (3) Turn-over  
 (4) Climb-over  
 (5) Fall-over  
 (6) Bounce-over  
 (7) Collision with another vehicle  
 (8) Other rollover initiation type (specify):  
 (9) Unknown rollover initiation type

## 60. Location of Rollover Initiation

- (0) No rollover  
 (1) On roadway  
 (2) On shoulder—paved  
 (3) On shoulder—unpaved  
 (4) On roadside or divided trafficway median  
 (9) Unknown

## 61. Rollover Initiation Object Contacted

## 62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify):

## (8) Non-contact rollover forces (specify):

(9) Unknown

## 63. Direction of Initial Roll

- (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (5) End-over-end (i.e., primarily about the lateral axis)  
 (9) Unknown roll direction

## PRECRASH DATA

## 64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight  
 (02) Slowing or stopping in traffic lane  
 (03) Starting in traffic lane  
 (04) Stopped in traffic lane  
 (05) Passing or overtaking another vehicle  
 (06) Disabled or parked in travel lane  
 (07) Leaving a parking position  
 (08) Entering a parking position  
 (09) Turning right  
 (10) Turning left  
 (11) Making a U-turn  
 (12) Backing up (other than for parking position)  
 (13) Negotiating a curve  
 (14) Changing lanes  
 (15) Merging  
 (16) Successful avoidance maneuver to a previous critical event  
 (97) Other (specify):  
 (98) No driver present  
 (99) Unknown

## PRECRASH DATA (Continued)

65. Critical Precrash Event 15*This Vehicle Loss of Control Due To:*

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): \_\_\_\_\_
- (09) Unknown cause of control loss

*This Vehicle Traveling*

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (19) Unknown travel direction

*Other Motor Vehicle In Lane*

- (50) Stopped
- (51) Traveling in same direction with lower speed (i.e., lower steady speed or decelerating)
- (52) Traveling in same direction with higher speed
- (53) Traveling in opposite direction
- (54) In crossover
- (55) Backing
- (59) Unknown travel direction of other motor vehicle in lane

*Other Motor Vehicle Encroaching Into Lane*

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

*Pedestrian or Pedalcyclist, or Other Nonmotorist*

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian - unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching roadway (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

*Object or Animal*

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location

(98) Other critical precrash event (specify): \_\_\_\_\_

(99) Unknown

For Corrective Actions Attempted see variable GV14 (Attempted Avoidance Manuever)

66. Precrash Stability After Avoidance Maneuver 9

- (0) No avoidance maneuver
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify): \_\_\_\_\_
- (8) No driver present
- (9) Precrash stability unknown

67. Precrash Directional Consequences of Avoidance Maneuver (Corrective Action) 9

- (0) No avoidance maneuver
- (1) Vehicle stayed in travel lane where avoidance maneuver was initiated
- (2) Vehicle stayed on roadway but left travel lane where avoidance maneuver was initiated
- (3) Vehicle stayed on roadway, not known if left travel lane where avoidance maneuver was initiated
- (4) Vehicle departed roadway
- (5) Avoidance maneuver initiated off roadway
- (8) No driver present
- (9) Directional consequences unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV35 = 0), \*\*\*  
DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS.

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*  
THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



## GENERAL VEHICLE LOG

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

TO BE COMPLETED BY TEAM	TO BE COMPLETED BY THE ZONE CENTER														
1. PSU Number <span style="float: right;"><u>NCST</u></span>	10. Reconstruction Program (Most Severe Impact) _____ (0) Not present (1) Added (2) Dropped (3) Changed (4) Correct														
2. Case Number—Stratum <span style="float: right;"><u>9304</u></span>	11. Reason(s) Program Results Dropped Or Changed a. Algorithm choice b. Collision type c. Vehicle type d. Size / stiffness / weight e. Improved PDOF f. CDC g. Trajectory data h. Damage data i. Heading angle for Oldmiss  <div style="display: flex; justify-content: space-around; font-size: small;"> <span>a</span><span>b</span><span>c</span><span>d</span><span>e</span><span>f</span><span>g</span><span>h</span><span>i</span> </div> <table border="1" style="margin-left: auto; margin-right: auto; text-align: center;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>														
3. Researcher Completing Form <span style="float: right;"></span>															
4. Vehicle Number <span style="float: right;"><u>03</u></span>															
5. Vehicle Disposition/Type <span style="float: right;"><u>1</u></span> (1) Towed, CDS applicable (2) Non-towed, CDS applicable (not AOPS) (3) Non-CDS applicable (4) Non-towed AOPS—CDS applicable															
6. Reason Vehicle Inspection Not Completed <span style="float: right;"><u>01</u></span> (00) Non-CDS applicable vehicle (01) Complete inspection (02) Partial inspection -- under repair (03) Partial inspection -- repair (04) Partial inspection -- other (specify): _____  (05) Vehicle cannot be located (06) Vehicle destroyed (07) Vehicle outside of study area (08) Vehicle impounded (09) Vehicle sold (10) Hit and run vehicle (11) Owner could not be located (12) Owner refusal (13) Insurance company refusal (14) Attorney refusal or litigation (15) Repair or tow facility refusal (16) Stolen (17) Wrong name and address on PAR (18) Caseload / staff turnover (19) Other (specify): _____															
7. Knowledge Of Highest Delta V Results <span style="float: right;"><u>10</u></span> <i>Known</i> (01) CRASH-PC damage only (02) CRASH-PC damage and trajectory (03) OLDMISS (completed by Zone Center)  <i>Unknown</i> (04) Rollover (05) Other non-horizontal force (06) Sideswipe type damage / severe override (07) Vehicle out of scope / pedestrian (08) Yielding object (09) Overlapping damage (10) Insufficient data (11) Other (specify): _____ (12) OLDMISS form - pending review by Zone Center															
8. Presence Of Non-coded Reconstruction Program? <span style="float: right;"><u>1</u></span> (0) No (1) Yes															
9. Data Obtained For This Vehicle's Most Severe Impact (Regardless of Usage) <span style="float: right;"><u>3</u></span> (0) No data obtained (1) CDC data only (2) Trajectory data only (3) CDC and crush profile only (4) CDC and trajectory data only (5) CDC, crush profile, and trajectory data															
DATA STATUS OF VARIABLE NUMBERS 3-67															
<div style="display: flex; justify-content: space-between; font-size: x-small;"> <span>3    4    5    6    7    8    9    10    11    12    13</span> </div> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td> </tr> </table>															
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Data Status Codes: (Blank) Correct (1) Derived error (2) Non-correctable error (3) Correctable error (4) Change--no error (7) Incorrect edit override (8) MDE error (9) Unknown coded															

**IF THIS CDS VEHICLE WAS NOT INSPECTED OR IF THIS WAS NOT A CDS VEHICLE,  
DO NOT COMPLETE AN EXTERIOR OR INTERIOR VEHICLE LOG**

## EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

Administration		System Identification	
1. Primary Sampling Unit Number	<u>NCSI</u>	3. Vehicle Number	<u>03</u>
2. Case Number - Stratum	<u>9304</u>		

## VEHICLE IDENTIFICATION

VIN 1G4A219 [REDACTED] Model Year 86  
Vehicle Make (specify): Buick Vehicle Model (specify): Century

## LOCATOR

Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L
1	beg 57cm fwd of RR axle - ends RR corner	beg 80 cm fwd of RR axle - ends RR corner
2	beg 36cm fwd of LF axle - ends LR corner	beg 40 cm fwd of LF axle - end LR corner

### CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure and document on the vehicle diagram the location of maximum crush.

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

**Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.**

Use as many lines/columns as necessary to describe each damage profile.

[illegible]

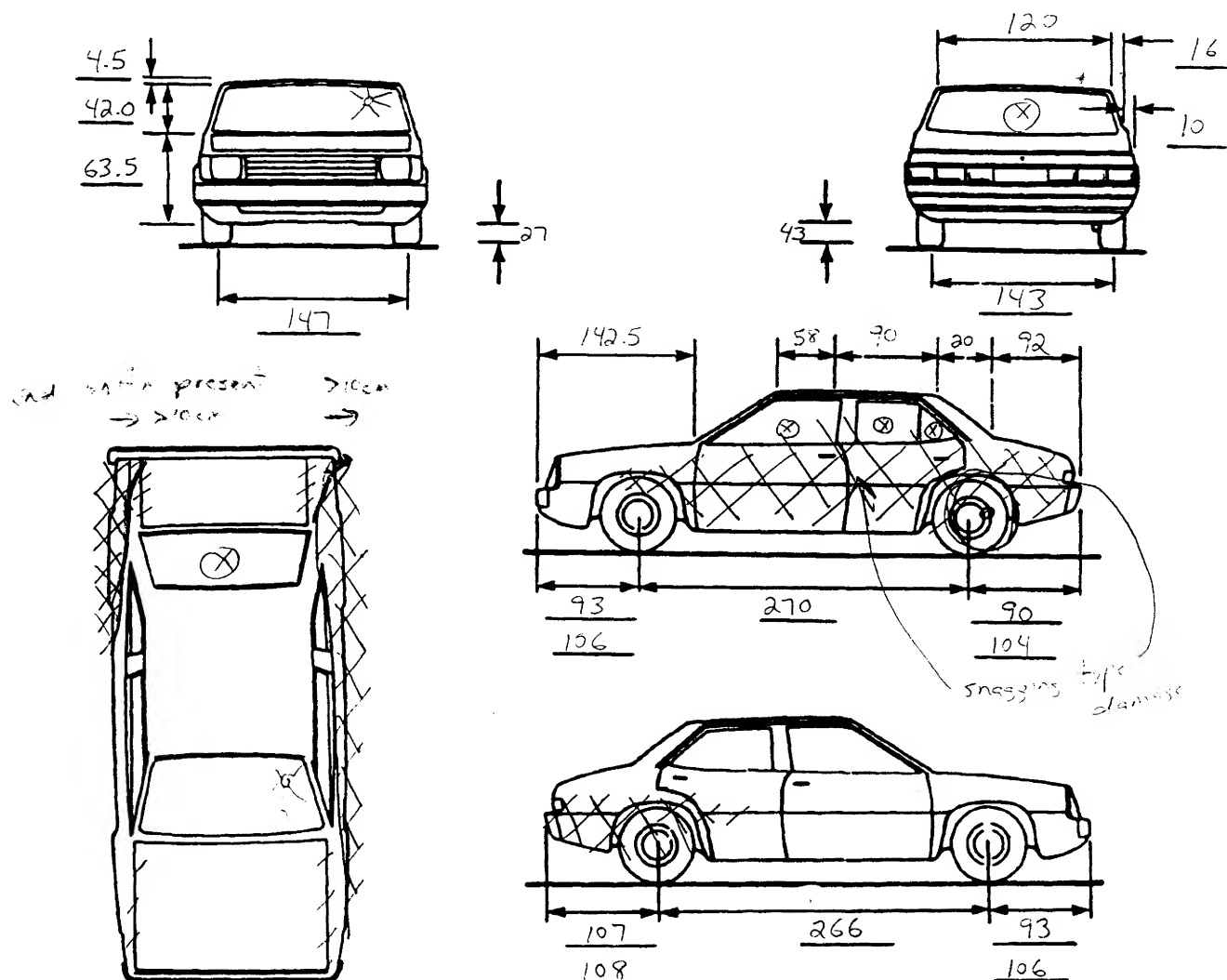
# ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>104.9</u>	inches	x 2.54	=	<u>266</u>	cm
Overall Length	<u>189.1</u>	inches	x 2.54	=	<u>480</u>	cm
Maximum Width	<u>67.7</u>	inches	x 2.54	=	<u>172</u>	cm
Curb Weight	<u>2,690</u>	pounds	x .4536	=	<u>1,220</u>	kg
Average Track	<u>57.7</u>	inches	x 2.54	=	<u>147</u>	cm
Front Overhang	<u>    </u>	inches	x 2.54	=	<u>106</u>	cm
Rear Overhang	<u>    </u>	inches	x 2.54	=	<u>108</u>	cm
Undeformed End Width	<u>    </u>	inches	x 2.54	=	<u>    </u>	cm
Engine Size: cyl./displ.	<u>    </u>	cc	x .001	=	<u>    </u>	L
	<u>    </u>	CID	x .0164	=	<u>    </u>	L

## VEHICLE DAMAGE SKETCH

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>1</u> (1) Yes (2) No (8) NA (9) Unk.		<b>b. Tire deflated</b> RF <u>2</u> LF <u>1</u> RR <u>2</u> LR <u>1</u>		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>266</u> cm Overall Length <u>480</u> cm Maximum Width <u>172</u> cm Curb Weight <u>1220</u> kg Average Track <u>147</u> cm Front Overhang <u>106</u> cm Rear Overhang <u>108</u> cm Undeformed End Width <u>168</u> cm Engine Size: cyl./displ. _____ L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF $\pm$ _____ ° LF $\pm$ _____ ° RR $\pm$ _____ ° LR $\pm$ <u>00</u> ° Within $\pm$ 5 degrees	
<b>TYPE OF TRANSMISSION</b> <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic				<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD		Approximate Cargo Weight <u>0</u> kg	

## MEASUREMENTS IN CENTIMETERS



**NOTES:** Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

(01-30) — Vehicle Number

(31) Overturn — rollover

(32) Fire or explosion

(33) Jackknife

(34) Other intraunit damage (specify):

(35) Noncollision injury

(38) Other noncollision (specify):

(39) Noncollision -- details unknown

### Collision With Fixed Object

(41) Tree ( $\leq 10$  cm in diameter)

(42) Tree ( $> 10$  cm in diameter)

(43) **Shrubby or bush**

(44) Embankment

(45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

(50) Pole or post ( $\leq 10$  cm in diameter)

(51) Pole or post (> 10 cm but ≤ 30 cm in diameter)

(52) Pole or post (> 30 cm in diameter)

(53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail)  
(specify):

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify):

(69) Unknown fixed object

### Collision with Nonfixed Object

(71) Motor vehicle not in-transport

(72) Pedestrian

(73) Cyclist or cycle

(74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) Animal

(77) Train

(78) Trailer, disconnected in transport

(88) Other nonfixed object (specify):

(89) Unknown nonfixed object

(98) Other event (specify):

(99) Unknown event or object

## DEFORMATION CLASSIFICATION BY EVENT NUMBER

[illegible]

## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. <u>02</u>	7. <u>R</u>	8. <u>Z</u>	9. <u>E</u>	10. <u>W</u>	11. <u>03</u>

## Second Highest Delta "V"

12. <u>02</u>	13. <u>02</u>	14. <u>10</u>	15. <u>L</u>	16. <u>D</u>	17. <u>E</u>	18. <u>W</u>	19. <u>03</u>
---------------	---------------	---------------	--------------	--------------	--------------	--------------	---------------

## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>±D</u>
<u>187</u>	<u>026</u>	<u>028</u>	<u>031</u>	<u>010</u>	<u>012</u>	<u>000</u>	<u>⊕ 158</u>

## Second Highest Delta "V"

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>±D</u>
<u>400</u>	<u>000</u>	<u>040</u>	<u>025</u>	<u>009</u>	<u>005</u>	<u>000</u>	<u>⊕ 025</u>

26. Are CDCs Documented but Not Coded on The Automated File? 0  
 (0) No  
 (1) Yes

27. Researcher's Assessment of Vehicle Disposition 1  
 (0) Not towed due to vehicle damage  
 (1) Towed due to vehicle damage  
 (9) Unknown

28. Original Wheelbase 266  
 Code to the nearest centimeter  
 (999) Unknown

104.9 inches X 2.54 = 266 centimeters

29. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle? 0

(0) No post manufacturer modifications

(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

\_\_\_\_\_  
(Include photograph of CERTIFICATION  
PLACARD in case report)

(9) Unknown if vehicle is modified

30. Fire Occurrence 0

(0) No fire

Yes, fire occurred

(1) Minor

(2) Major

(9) Unknown

31. Origin of Fire 0

(0) No fire

(1) Vehicle exterior (front, side, back, top)

(2) Exhaust system

(3) Fuel tank (and other fuel retention  
system parts)

(4) Engine compartment

(5) Cargo/trunk compartment

(6) Instrument panel

(7) Passenger compartment area

(8) Other location (specify): \_\_\_\_\_

(9) Unknown

32. Type of Fuel Tank 1

(0) No fuel tank (electrical vehicle)

(1) Metallic

(2) Non-metallic

(9) Unknown

\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED AND WAS NOT AN AOPS \*\*\*  
(I.E., GV09=0 OR 9 AND GV36=0), DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



## EXTERIOR VEHICLE LOG

## TO BE COMPLETED BY TEAM

1. PSU Number NC SI
2. Case Number—Stratum 93 04
3. Researcher Completing Form [Redacted]
4. Vehicle Number 03
5. Date Vehicle Inspected [Redacted] 93

13. Number of Coded CDCs (0,1,2)     14. Number of Coded Crush Profiles (0,1,2)     

## TO BE COMPLETED BY ZONE CENTER

6. Applicable Precrash Measurements       
(0) Not applicable  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
7. Impact Damage Documentation       
(0) Not applicable  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
8. Quality Of Vehicle Damage Sketch       
(0) Not applicable (e.g., repaired vehicle)  
(1) Substandard - beyond researcher control  
(2) Substandard  
(3) Standard
9. Number of Exterior Vehicle Slides
10. Exterior Slides Subject Quality       
(0) Not applicable  
(1) Substandard  
(2) Standard
11. Exterior Slides Quality       
(0) Not applicable  
(1) Substandard  
(2) Standard
12. Primary Error Source (Vehicle Plane)       
(0) No error  
(1) Front  
(2) Side (left or right)  
(3) Back (rear)  
(4) Top  
(5) Undercarriage  
(8) Other (specify):

## DATA STATUS OF VARIABLE NUMBERS 4-32

Highest CDC

4	5	6	7	8	9	10	11
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Secondary CDC

12	13	14	15	16	17	18	19
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Highest Crush Profile

20	21	22
<input type="text"/>	<input type="text"/>	<input type="text"/>

Secondary Crush Profile

23	24	25
<input type="text"/>	<input type="text"/>	<input type="text"/>

26	27	28	29	30	31	32
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Data Status Codes:

- (Blank) Correct  
(1) Derived error  
(2) Non-correctable error  
(3) Correctable error  
(4) Change—no error  
(5) Sequencing error  
(7) Incorrect edit override  
(8) MDE error  
(9) Unknown coded

IF THIS VEHICLE WAS NOT TOWED (I.E., GV09 ≠ 1), DO NOT COMPLETE THE  
INTERIOR VEHICLE LOG





# INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number NCST  
2. Case Number - Stratum 9304  
3. Vehicle Number 03

## INTEGRITY

4. Passenger Compartment Integrity 11  
(00) No integrity loss  
  
Yes, Integrity Was Lost Through  
(01) Windshield  
(02) Door (side)  
(03) Door/hatch (back door)  
(04) Roof  
(05) Roof glass  
(06) Side window  
(07) Rear window (backlight)  
(08) Roof and roof glass  
(09) Windshield and door (side)  
(10) Windshield and roof  
(11) Side and rear window (side window and backlight)  
(12) Windshield and side window  
(13) Door and side window  
(98) Other combination of above (specify):  
  
(99) Unknown

## Door, Tailgate or Hatch Opening

5. LF 3 6. RF 1 7. LR 3 8. RR 3 9. TG/H 0  
  
(0) No door/gate/hatch  
(1) Door/gate/hatch remained closed and operational  
(2) Door/gate/hatch came open during collision  
(3) Door/gate/hatch jammed shut  
(8) Other (specify):  
  
(9) Unknown

## Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code 0

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0  
  
(0) No door/gate/hatch or door not opened  
  
Door, Tailgate or Hatch Came Open During Collision  
(1) Door operational (no damage)  
(2) Latch/striker failure due to damage  
(3) Hinge failure due to damage  
(4) Door structure failure due to damage  
(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage  
(6) Latch/striker and hinge failure due to damage  
(8) Other failure (specify):  
  
(9) Unknown

## GLAZING

### Glazing Damage from Impact Forces

15. WS 2 16. LF 6 17. RF 0 18. LR 6 19. RR 6  
20. BL 6 21. Roof 0 22. Other 0

- (0) No glazing damage from impact forces  
(2) Glazing in place and cracked from impact forces  
(3) Glazing in place and holed from impact forces  
(4) Glazing out-of-place (cracked or not) and not holed from impact forces  
(5) Glazing out-of-place and holed from impact forces  
(6) Glazing disintegrated from impact forces  
(7) Glazing removed prior to accident  
(8) No glazing  
(9) Unknown if damaged

### Glazing Damage from Occupant Contact

23. WS 2 24. LF 0 25. RF 0 26. LR 0 27. RR 0  
28. BL 0 29. Roof 0 30. Other 0

- (0) No occupant contact to glazing or no glazing  
(1) Glazing contacted by occupant but no glazing damage  
(2) Glazing in place and cracked by occupant contact  
(3) Glazing in place and holed by occupant contact  
(4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact  
(5) Glazing out-of-place by occupant contact and holed by occupant contact  
(6) Glazing disintegrated by occupant contact  
(9) Unknown if contacted by occupant

If No Glazing Damage **And** No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

### Type of Window/Windshield Glazing

31. WS 1 32. LF 2 33. RF 0 34. LR 2 35. RR 2  
36. BL 2 37. Roof 0 38. Other 0

- (0) No glazing contact and no damage, or no glazing  
(1) AS-1 - Laminated  
(2) AS-2 - Tempered  
(3) AS-3 - Tempered-tinted  
(4) AS-14 - Glass/Plastic  
(8) Other (specify):  
  
(9) Unknown

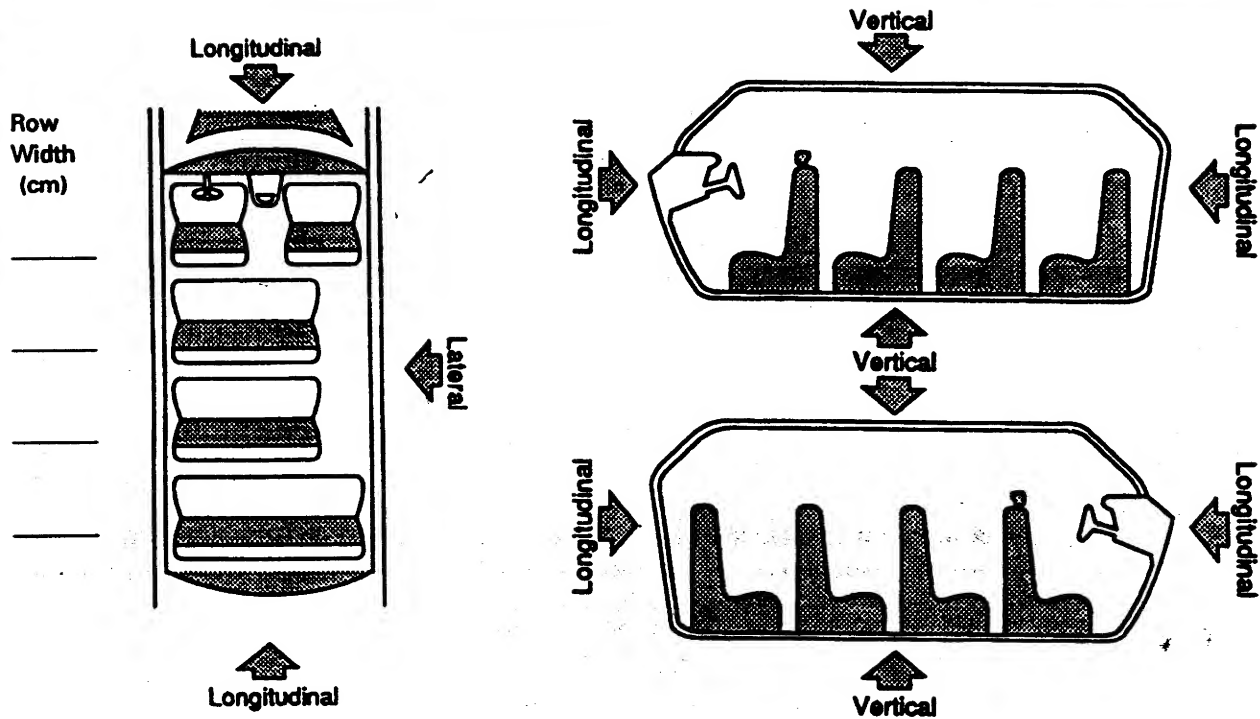
### Window Precrash Glazing Status

39. WS 1 40. LF 2 41. RF 0 42. LR 2 43. RR 2  
44. BL 1 45. Roof 0 46. Other 0

- (0) No glazing contact and no damage, or no glazing  
(1) Fixed  
(2) Closed  
(3) Partially opened  
(4) Fully opened  
(9) Unknown

## INTRUSION WORKSHEET

Note: Sketch intruded areas



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)				DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	—	INTRUDED VALUE	=	
11	10	68.5	—	67.0	= 1.5	lat
11	07	63.5	—	55.5	= 8.0	lat
11	13	54.0	—	53.0	= 1.0	lat
21	10	70.0	—	40.5	= 29.6	lat
21	08	70.0	—	36.5	= 33.5	lat
21	13	55.0	—	53.5	= 1.5	lat
23	10	70.0	—	65.5	= 4.5	lat
23	08	70.0	—	64.0	= 6.0	lat
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	
			—		=	

3

2

1

5

4

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

## INTRUDING COMPONENT

## Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify):

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

## Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify):
- (32) Other exterior object in the environment (specify):
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify):
- (99) Unknown

## LOCATION OF INTRUSION

- Front Seat
- (11) Left
  - (12) Middle
  - (13) Right

- Fourth Seat
- (41) Left
  - (42) Middle
  - (43) Right

- Second Seat
- (21) Left
  - (22) Middle
  - (23) Right

- (97) Catastrophic
- (98) Other enclosed area (specify)

- (99) Unknown

- Third Seat
- (31) Left
  - (32) Middle
  - (33) Right

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>21</u>	48. <u>08</u>	49. <u>4</u>	50. <u>3</u>
2nd	51. <u>21</u>	52. <u>10</u>	53. <u>3</u>	54. <u>3</u>
3rd	55. <u>11</u>	56. <u>07</u>	57. <u>2</u>	58. <u>3</u>
4th	59. <u>23</u>	60. <u>08</u>	61. <u>1</u>	62. <u>3</u>
5th	63. <u>23</u>	64. <u>10</u>	65. <u>1</u>	66. <u>3</u>
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

## STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

No Deformation

## STEERING COLUMN

## 87. Steering Column Type

- (1) Fixed column  
(2) Tilt column  
(3) Telescoping column  
(4) Tilt and telescoping column  
(8) Other column type (specify): \_\_\_\_\_

(9) Unknown

2

## 88. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

X X

## 89. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

X X X

## 90. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

X X X

## 91. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

X X X

## 92. Steering Rim/Spoke Deformation

- Code actual measured deformation to the nearest centimeter  
(00) No steering rim deformation  
(01-14) Actual measured value in centimeters  
(15) 15 centimeters or more  
(98) Observed deformation cannot be measured  
(99) Unknown

0 0

## 93. Location of Steering Rim/Spoke Deformation

(00) No steering rim deformation

0 0

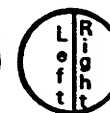
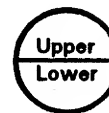
## Quarter Sections

- (01) Section A  
(02) Section B  
(03) Section C  
(04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
(06) Lower half of rim/spoke  
(07) Left half of rim/spoke  
(08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
(10) Undetermined location  
(99) Unknown

## INSTRUMENT PANEL

## 94. Odometer Reading

1 1 8,000

kilometers—Code to the nearest 1,000 kilometers

- (000) No odometer  
(001) Less than 1,500 kilometers  
(500) 499,500 kilometers or more  
(999) Unknown

73 153 miles X 1.6093 = 117 725 kilometers

Source: [REDACTED]

## 95. Instrument Panel Damage from Occupant Contact?

- (0) No  
(1) Yes  
(9) Unknown

0

## 96. Knee Bolsters Deformed from Occupant Contact?

- (0) No  
(1) Yes  
(8) Not present  
(9) Unknown

8

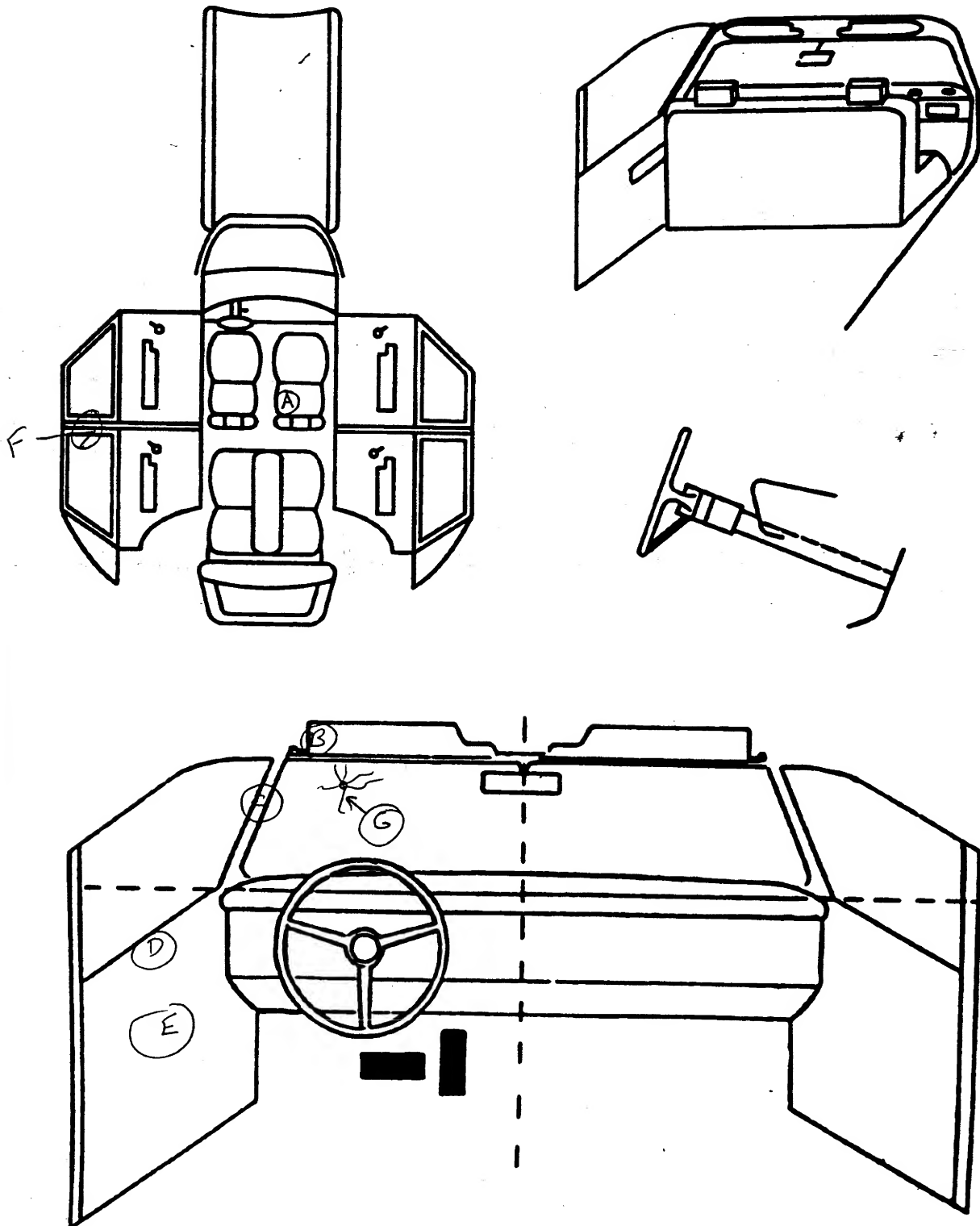
## 97. Did Glove Compartment Door Open During Collision(s)?

- (0) No  
(1) Yes  
(8) Not present  
(9) Unknown

0

## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	40	1		probable FRP of driver / lg. blood stain	3
B	03	1	head	hair on visor	1
C	22	1		blood, fx plastic covering A-pillar	1
D	20	1	Left side	scuff, cloth residue	1
E	21	1	Left side	deformed arm rest / PDOF	2
F	23	1		blood stain	3
G	01	1	head	spiderweb fx of windshield	1
H					
I					
J					
K					
L					
M					
N					

## CODES FOR INTERIOR COMPONENTS

## FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

- (23) Left B-pillar

- (24) Other left pillar (specify): \_\_\_\_\_

- (25) Left side window glass or frame

- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.

- (27) Other left side object (specify): \_\_\_\_\_

- (28) Left side window sill

## RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests

- (31) Right side hardware or armrest

- (32) Right A (A1/A2)-pillar

- (33) Right B-pillar

- (34) Other right pillar (specify): \_\_\_\_\_

- (35) Right side window glass or frame

- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.

- (37) Other right side object (specify): \_\_\_\_\_

- (38) Right side window sill

## INTERIOR

- (40) Seat, back support

- (41) Belt restraint webbing/buckle

- (42) Belt restraint B-pillar attachment point

- (43) Other restraint system component (specify): \_\_\_\_\_

- (44) Head restraint system

- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

- (46) Other occupants (specify): \_\_\_\_\_

- (47) Interior loose objects

- (48) Child safety seat (specify): \_\_\_\_\_

- (49) Other interior object (specify): \_\_\_\_\_

## ROOF

- (50) Front header

- (51) Rear header

- (52) Roof left side rail

- (53) Roof right side rail

- (54) Roof or convertible top

## FLOOR

- (56) Floor (including toe pan)

- (57) Floor or console mounted transmission lever, including console

- (58) Parking brake handle

- (59) Foot controls including parking brake

## REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.

- (62) Other rear object (specify): \_\_\_\_\_

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## AUTOMATIC RESTRAINTS

**NOTES:** Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

### AIR BAGS

		Left	Right
F I R S T	Availability/Function	<input type="radio"/>	<input type="radio"/>
	Deployment	<input type="radio"/>	<input type="radio"/>
	Failure	<input type="radio"/>	<input type="radio"/>

#### Air Bag System Availability/Function

- (0) Not equipped/not available  
(1) Air bag

#### Non-functional

- (2) Air bag disconnected (specify): \_\_\_\_\_

- (3) Air bag not reinstalled  
(9) Unknown

#### Air Bag System Deployment

- (0) Not equipped/not available  
(1) Air bag deployed during accident (as a result of impact)  
(2) Air bag deployed inadvertently just prior to accident  
(3) Air bag deployed, accident sequence undetermined  
(4) Nondeployed  
(5) Unknown if deployed  
(6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(9) Unknown

#### Did Air Bag System Fail?

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(9) Unknown

### AUTOMATIC BELTS

		Left	Right
F I R S T	Availability/Function	<input type="radio"/>	<input type="radio"/>
	Use	<input type="radio"/>	<input type="radio"/>
	Type	<input type="radio"/>	<input type="radio"/>
	Proper Use	<input type="radio"/>	<input type="radio"/>
	Failure Modes	<input type="radio"/>	<input type="radio"/>

#### Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available  
(1) 2 point automatic belts  
(2) 3 point automatic belts  
(3) Automatic belts - type unknown

#### Non-functional

- (4) Automatic belts destroyed or rendered inoperative  
(9) Unknown

#### Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Automatic belt in use  
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
(3) Automatic belt use unknown  
(9) Unknown

#### Automatic (Passive) Belt System Type

- (0) Not equipped/not available  
(1) Non-motorized system  
(2) Motorized system  
(9) Unknown

#### Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used  
(1) Automatic belt used properly  
(2) Automatic belt used properly with child safety seat

#### Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm  
(4) Automatic shoulder belt worn behind back  
(5) Automatic belt worn around more than one person  
(6) Lap portion of automatic belt worn on abdomen  
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_  
(8) Other improper use of automatic belt system (specify): \_\_\_\_\_  
(9) Unknown

#### Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use  
(1) No automatic belt failure(s)  
(2) Torn webbing (stretched webbing not included)  
(3) Broken buckle or latchplate  
(4) Upper anchorage separated  
(5) Other anchorage separated (specify): \_\_\_\_\_  
(6) Broken retractor  
(7) Combination of above (specify): \_\_\_\_\_  
(8) Other automatic belt failure (specify): \_\_\_\_\_  
(9) Unknown



## MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a Child safety seat is present, encode the data on the back of this page.

If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.

		Left	Center	Right
FIRST	Availability	4	3	4
	Use	04	00	00
	Failure Modes	1	0	0
SECOND	Availability	3	3	3
	Use	00	00	00
	Failure Modes	0	0	0
THIRD	Availability			
	Use			
	Failure Modes			
OTHER	Availability			
	Use			
	Failure Modes			

**Manual (Active) Belt System Availability**

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

**Integral Belt Partially Destroyed**

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown

**Manual (Active) Belt System Use**

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): \_\_\_\_\_
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown

**(08) Other belt used (specify):**

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

**Manual (Active) Belt Failure Modes During Accident**

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_
- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other manual belt failure (specify): \_\_\_\_\_
- (9) Unknown

\* belt  
frayed  
slightly, tab,  
peening on  
retractor + belt  
pinched off between  
door + seat,  
belt won't retract  
post accident

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number	N/A					
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

**1. Type of Child Safety Seat**

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

**2. Child Safety Seat Orientation**

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):
- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

**3. Child Safety Seat Harness Usage**

**4. Child Safety Seat Shield Usage**

**5. Child Safety Seat Tether Usage**  
Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

**6. Child Safety Seat Make/Model**  
(Specify make/model and occupant number)

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## HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	Head Restraint Type/Damage	3	0	3
	Seat Type	02	03	02
	Seat Performance	6	0	0
	Seat Orientation	1	0	0
SECOND	Head Restraint Type/Damage	0	0	0
	Seat Type	03	03	03
	Seat Performance	0	0	0
	Seat Orientation	0	0	0
THIRD	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			
OTHER	Head Restraint Type/Damage			
	Seat Type			
	Seat Performance			
	Seat Orientation			

## Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify):

(9) Unknown

## Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify):

(10) Box mounted seat (i.e., van type)

(99) Unknown

## Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify:
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify):

*B-pillar intrusion caused some lateral seat deformity*

(7) Combination of above (specify):

(8) Other (specify):

(9) Unknown

## Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify):

(9) Unknown

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION**      No [☒]      Yes [ ]

Describe indications of ejection and body parts involved in partial ejection(s):

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---

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection
- (1) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

**Ejection Area**

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

**(9) Unknown****Ejection Medium**

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

**(9) Unknown****Medium Status (Immediately Prior to Impact)**

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

**ENTRAPMENT**      No [☒]      Yes [ ]

Describe entrapment mechanism:

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Component(s):

(Note in vehicle interior diagram)



## INTERIOR VEHICLE LOG

### TO BE COMPLETED BY TEAM

1. PSU Number NCST
2. Case Number—Stratum 9304
3. Researcher Completing Form [Redacted]
4. Vehicle Number 03

### TO BE COMPLETED BY ZONE CENTER

5. Documentation Of Integrity \_\_\_\_\_
6. Documentation Of Glazing \_\_\_\_\_
7. Documentation of Intrusions \_\_\_\_\_
8. Documentation of Steering Column/Wheel \_\_\_\_\_
9. Documentation of Occupant Contacts \_\_\_\_\_
10. Documentation of Restraint Systems \_\_\_\_\_
11. Documentation of Seats \_\_\_\_\_
12. Number of Interior Vehicle Slides \_\_\_\_\_
13. Interior Slides Subject Quality \_\_\_\_\_
14. Interior Slides Quality \_\_\_\_\_

#### Codes For Log Variables 5-11 and 13-14

- (0) Not applicable
- (1) Substandard - beyond researcher control
- (2) Substandard
- (3) Standard

15. Number of Coded Intrusions \_\_\_\_\_

### DATA STATUS OF VARIABLE NUMBERS 4-97

#### Integrity

4 5 6 7 8 9 10 11 12 13 14

--	--	--	--	--	--	--	--	--	--	--

#### Glazing

15 16 17 18 19 20 21 22 23 24 25

--	--	--	--	--	--	--	--	--	--	--

26 27 28 29 30 31 32 33 34 35 36

--	--	--	--	--	--	--	--	--	--	--

37 38 39 40 41 42 43 44 45 46

--	--	--	--	--	--	--	--	--	--

#### Intrusion

47 48 49 50 51 52 53 54 55 56 57

--	--	--	--	--	--	--	--	--	--	--

58 59 60 61 62 63 64 65 66 67 68

--	--	--	--	--	--	--	--	--	--	--

69 70 71 72 73 74 75 76 77 78 79

--	--	--	--	--	--	--	--	--	--	--

80 81 82 83 84 85 86

--	--	--	--	--	--	--

#### Steering Column/Wheel and Instrument Panel

87 88 89 90 91 92 93 94 95 96 97

	XX	XX	XX	XX						
--	----	----	----	----	--	--	--	--	--	--

#### Data Status Codes:

- (Blank) Correct
- (1) Derived error
- (2) Non-correctable error
- (3) Correctable error
- (4) Change—no error
- (5) Sequencing error
- (7) Incorrect edit override
- (8) MDE error
- (9) Unknown coded



# OCCUPANT ASSESSMENT FORM

## OCCUPANT'S SEATING

1. Primary Sampling Unit Number NCST  
2. Case Number - Stratum 9304  
3. Vehicle Number 03  
4. Occupant Number 01

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 27  
Code actual age at time of accident.  
(00) Less than one year old (specify by month):  
\_\_\_\_\_  
(97) 97 years and older  
(99) Unknown
6. Occupant's Sex 2  
(1) Male  
(2) Female  
(9) Unknown
7. Occupant's Height 999  
Code actual height to the nearest  
centimeter.  
(999) Unknown  
\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters
8. Occupant's Weight 999  
Code actual weight to the nearest  
kilogram.  
(999) Unknown  
\_\_\_\_ pounds X .4536 = \_\_\_\_\_ kilograms
9. Occupant's Role 1  
(1) Driver  
(2) Passenger  
(9) Unknown

10. Occupant's Seat Position 11  
*Front Seat*  
(11) Left side  
(12) Middle  
(13) Right side  
(14) Other (specify): \_\_\_\_\_  
(15) On or in the lap of another occupant

- Second Seat*  
(21) Left side  
(22) Middle  
(23) Right side  
(24) Other (specify): \_\_\_\_\_  
(25) On or in the lap of another occupant

- Third Seat*  
(31) Left side  
(32) Middle  
(33) Right side  
(34) Other (specify): \_\_\_\_\_  
(35) On or in the lap of another occupant

- Fourth Seat*  
(41) Left side  
(42) Middle  
(43) Right side  
(44) Other (specify): \_\_\_\_\_  
(45) On or in the lap of another occupant

- (97) In or on unenclosed area  
(98) Other seat (specify): \_\_\_\_\_  
(99) Unknown

11. Occupant's Posture 9  
(0) Normal posture  
*Abnormal posture*  
(1) Kneeling or standing on seat  
(2) Lying on or across seat  
(3) Kneeling, standing or sitting in front of seat  
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window  
(5) Sitting on a console  
(6) Lying back in a reclined seat position  
(7) Bracing with feet or hands on a surface in front of seat  
(8) Other abnormal posture (specify): \_\_\_\_\_  
(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection ☐

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area ☐

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium ☐

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) ☐

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment ☐

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

18. Manual (Active) Belt System Use 04

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify): \_\_\_\_\_

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify): \_\_\_\_\_

(99) Unknown if belt used \_\_\_\_\_

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Air Bag System Availability/Function 0

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown

(9) Police indicated "unknown"



## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position 3

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify):  
\_\_\_\_\_

(9) Unknown

26. Seat Type (this Occupant Position) 02

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify):  
\_\_\_\_\_

- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position) 6

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion

(specify): B pillar intrusion applied  
lateral pressure on seat bottom  
causing some deformity

(7) Combination of above (specify):  
\_\_\_\_\_

(8) Other (specify):  
\_\_\_\_\_

(9) Unknown

## CHILD SAFETY SEAT

28. Child Safety Seat Make/Model 0 0 0

(000) No child safety seat  
 Applicable codes are found in your NASS CDS  
 Data Collection, Coding and Editing  
 (950) Built-in child safety seat  
 (997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

29. Type of Child Safety Seat 0

(0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat  
 (7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

30. Child Safety Seat Orientation 0 0

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

31. Child Safety Seat Harness Usage 0 032. Child Safety Seat Shield Usage 0 033. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to  
 Variables OA31-OA33.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether  
 added, not used  
 (02) After market harness/shield/tether used  
 (03) Child safety seat used, but no after market  
 harness/shield/tether added  
 (09) Unknown if harness/shield/tether  
 added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used  
 (12) Harness/shield/tether used  
 (19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used  
 (22) Harness/shield/tether used  
 (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

## INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 3

- (0) O - No injury  
(1) C - Possible injury  
(2) B - Nonincapacitating injury  
(3) A - Incapacitating injury  
(4) K - Killed  
(5) U - Injury, severity unknown  
(6) Died prior to accident  
(9) Unknown

35. Treatment - Mortality 9

- (0) No treatment  
(1) Fatal  
(2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization  
(4) Transported and released  
(5) Treatment at scene - nontransported  
(6) Treatment later  
(8) Treatment - other (specify):  
\_\_\_\_\_  
(9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 9

- (0) Not treated at a medical facility  
(1) Trauma center  
(2) Hospital  
(3) Medical clinic  
(4) Physician's office  
(5) Treatment later at medical facility  
(8) Other (specify):  
\_\_\_\_\_  
(9) Unknown

37. Hospital Stay 99

- (00) Not Hospitalized  
Code the number of days (up through 60)  
that the occupant stayed in hospital.  
(61) 61 days or more  
(99) Unknown

38. Working Days Lost 99

- Code the number of days  
(up through 60) that the occupant  
lost from work due to the accident  
(00) No working days lost  
(61) 61 days or more  
(62) Fatally injured  
(97) Not working prior to accident  
(99) Unknown

STOP - GO TO VARIABLE 44 ON PAGE 7

VARIABLES 39 THROUGH 43 ARE  
COMPLETED BY THE ZONE CENTER39. Time to Death 00

- Code number of hours from time of  
accident to time of death up through 24  
hours. If time of death is greater than 24  
hours, code number of days. (Note: 1 day =  
31, 2 days = 32, ... n days = 30 + n up  
through 30 days = 60)  
(00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- Code the Occupant Injury from line  
number(s) for the medically reported  
injury(s) which reportedly contributed to  
this occupant's death  
(00) Not fatal or no additional causes  
(97) Other result (includes fatal ruled  
disease) (specify):  
\_\_\_\_\_

(99) Unknown

43. Number of Recorded Injuries for  
This Occupant 97

- Code the actual number of  
injuries recorded for this occupant.  
(00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

**AUTOMATIC BELT SYSTEM**44. Automatic (Passive) Belt System Availability/ Function 0

- (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

45. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

46. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

47. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
 (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

48. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

49. Seat Orientation (this Occupant Position) 1

- (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER****TRAUMA DATA**50. Glasgow Coma Scale (GCS) Score (at Medical Facility) 97

- (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

51. Was the Occupant Given Blood? 9

- (1) No - blood not given  
 (2) Yes - blood given (specify units):  
 (9) Unknown if blood given

52. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 97

- (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?

NO [✓] YES [ ]

UPDATE CANDIDATE?

NO [✓] YES [ ]



## OCCUPANT ASSESSMENT LOG

### TO BE COMPLETED BY TEAM

1. PSU Number NCSI
2. Case Number—Stratum 9304
3. Researcher Completing Form [redacted]
4. Vehicle Number 03
5. Occupant Number 01
6. Interviewer Number [redacted]
7. Date Interview Completed 1/1
8. Date Official Medical Data Requested [redacted] 93
9. Date Official Medical Data Obtained [redacted] 93  
*Informed that no record of treatment exists*
10. Occupant's Role 1
  - (1) Driver
  - (2) Passenger
  - (3) Unknown
11. Interviewee For This Occupant 0
  - (0) No interview
  - (1) Same person

*Surrogate*

  - (2) Other occupant
  - (3) Relative or friend
  - (4) Multiple interviewees from above categories (specify): \_\_\_\_\_
12. Manner Of Interview 3
  - (0) No attempt
  - (1) Telephone
  - (2) In-person
  - (3) Questionnaire
  - (9) Unknown (for Zone Center use only)
13. Result Of Last Interview Attempt 01
  - (01) Unable to contact or locate
  - (02) Hit and run
  - (03) Fatal—surrogate not available
  - (04) In intensive care—surrogate not available
  - (05) Out-of-state resident
  - (06) Refused interview
  - (07) Insurance company refusal
  - (08) Attorney refusal or litigation
  - (09) No return of questionnaire
  - (10) Other (specify): \_\_\_\_\_
  - (11) Return of completed questionnaire
  - (12) Partial interview
  - (13) Complete interview

### 14. Was This Occupant Injured?

- 1
- (0) No
  - (1) Yes
  - (9) Unknown

### 15. Status of Medical Release

- 1
- (0) Occupant not injured
  - (1) Medical release not required at medical facility

### Medical Release Required

- (2) Required — not obtained
- (3) Required — obtained

### 16. Injury Treatment Status

- 09
- (00) Occupant not injured
  - (01) No treatment
  - (02) Fatal—died before hospitalization
  - (03) Fatal—died after hospitalization
  - (04) Hospitalization
  - (05) Emergency room treatment only
  - (06) Treatment at physician's office
  - (07) Treatment at scene or self treatment
  - (08) Outpatient surgery
  - (09) Treatment at medical facility—unknown level of treatment
  - (99) Unknown

### 17. Injury Information

#### Official

- |  | Form Received | Record Status |
|--|---------------|---------------|
| a. Autopsy (invasive examination)  | ___           | ___           |
| b. Post-ER medical record which includes information about death based on non-invasive examination | ___           | ___           |
| c. Admission record/summary of admission/discharge face sheet                                      | ___           | ___           |
| d. Discharge summary   | ___           | ___           |
| e. Operative report  | ___           | ___           |
| f. Radiographic record(s) post ER visit  | ___           | ___           |
| g. History and physical examination and/or consultation records                                    | ___           | ___           |
| h. Emergency room records  | ___           | <u>01</u>     |
| i. Radiographic record(s) associated with ER visit   | ___           | ___           |
| j. Private physician   | ___           | ___           |

#### Unofficial

- |                                  |          |     |
|----------------------------------|----------|-----|
| k. Lay coroner                   | ___      | ___ |
| l. EMS record                    | ___      | ___ |
| m. Interviewee                   | ___      | ___ |
| n. Other source (specify): _____ | <u>B</u> | ___ |
| o. Police report                 | <u>B</u> | ___ |

(See reverse side of this page for codes for variable 13)

### 18. Medical Facility Code

# National Accident Sampling System-Crashworthiness Data System: Occupant Assessment Log

## CODES FOR OCCUPANT ASSESSMENT LOG VARIABLE 16 (INJURY INFORMATION)

### OCCUPANT UPDATE FORM RECEIVED (FIRST COLUMN)

- (Blank) No or not applicable  
(1) Yes

### STATUS OF MEDICAL RECORD (SECOND COLUMN)

- (Blank) Not medically treated/record not required  
(01) No record of treatment at medical facility  
(02) Medical release required—not obtained  
(03) Injury not related to accident  
(04) Noncooperative hospital  
(05) Hospital out-of-study area  
(06) Private physician would not release data  
(07) Unknown if medically treated  
(08) To be updated  
(09) Record not received before file closeout  
(10) Record not obtained  
(11) Record obtained  
(12) Partial record obtained—not to be updated  
(13) Partial record obtained—to be updated

## TO BE COMPLETED BY ZONE CENTER

18. Documentation of Occupant Interview \_\_\_\_\_  
(Excludes Injury Data)  
(0) Not applicable  
(1) Substandard  
(2) Standard

### DATA STATUS OF VARIABLE NUMBERS 4-52

4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45	46	47
48	49	50	51	52						

### Data Status Codes:

- |                           |                             |
|---------------------------|-----------------------------|
| (Blank) Correct           | (5) Sequencing error        |
| (1) Derived error         | (7) Incorrect edit override |
| (2) Non-correctable error | (8) MDE error               |
| (3) Correctable error     | (9) Unknown coded           |
| (4) Change—no error       |                             |



## INTERVIEW FORM (A)

1. Primary Sampling Unit Number <u>NCSI</u>	Interviewee(s) Role or Name(s): _____ _____ _____
2. Case Number - Stratum <u>9304</u>	
3. Vehicle Number <u>03</u>	

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

### DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

*Not Interviewed*

### OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS



## CONTACT LOG

1. PSU Number

NCST

3. Vehicle Number

03

2. Case Number—Stratum

93 04

4. Assigned Researcher Number

[REDACTED]

### VEHICLE INSPECTION

### INTERVIEW

#### DRIVER INTERVIEW

#### OCCUPANT INTERVIEW

#### CONTACT

- (1) Owner/driver
- (2) Towyard
- (3) Repair facility \*
- (4) Salvage yard
- (5) Police
- (6) Insurance company
- (7) Attorney
- (8) Other (specify): \_\_\_\_\_

#### MANNER

- (1) Telephone
- (2) In-person
- (3) Questionnaire
- (4) Other (specify): \_\_\_\_\_

#### RESULT

- (1) Complete inspection
- (2) Partial inspection
- (3) Refusal
- (4) Vehicle moved to known location
- (5) Vehicle moved to unknown location
- (6) Vehicle located, no permission to inspect
- (7) Vehicle repaired
- (8) No answer/not home
- (9) Other (specify): \_\_\_\_\_

#### CONTACT

- (0) No interview
- (1) Driver
- (2) Other occupant
- (3) Relative or friend
- (4) Multiple interviewees from above categories

#### MANNER

- (0) Vehicle not occupied
- (1) Telephone
- (2) In-person
- (3) Questionnaire
- (4) Other (specify): \_\_\_\_\_

#### RESULT

- (01) Unable to contact or locate
- (02) Hit and run
- (03) Fatal—surrogate not available
- (04) In intensive care—surrogate not available
- (05) Out-of-state resident
- (06) Refused interview
- (07) Insurance company refusal
- (08) Attorney refusal or litigation
- (09) No return of questionnaire
- (10) Other (specify): No one home
- (11) Return of completed questionnaire
- (12) Partial interview
- (13) Complete interview



## APPENDIX C

V-1 1993 Dodge Intrepid

BEST AVAILABLE COPY

Dup. Cols. 1-8  
from prior card

Module A B

Format Q 1

AIRBAG SUPPLEMENT

AB-1

## ACCIDENT SUMMARY

ACCIDENT DATE 8/19/93

POLICE INVESTIGATED (1,2,9)\*

City \_ \_ \_ \_ County \_ \_ \_

## GENERAL LOCALITY

- (1) Freeway, Limited Access
- (2) Urban (City)
- (3) Urban-Rural (mixed)
- (4) Rural, Fields

## CONFIGURATION (First Harm)

- (0) Struck Object or Pedestrian
- (1) Rear-End
- (2) Head-On
- (3) Rear-to-Rear
- (4) Angle
- (5) Sideswipe-Same Direction
- (6) Sideswipe-Opposite Direct.
- (7) NonColl:eg Fell from Veh
- (8) NonImpact Deployment
- (9) Unknown

## FIRE INVOLVED (0) None

- (1) AirBag Vehicle
- (2) Other Vehicle
- (3) Both Vehicles
- (9) Unknown

## NUMBER: VEHICLES INVOLVED

(8)=8 or more

## PERSONS INVOLVED

## INJURED PERSONS

## MAXIMUM AIS IN ACCIDENT

## OTHER VEHICLE: MAXIMUM AIS

PRIME/DEPLOY IMPACT w AB VEH:  
EVENT NUMBERCDC 10-RZEW-3

## TOTAL DELTA-V

## Model Year, Make, Model, Body Type:

1986 Buick Century 4 dr.

## AIRBAG VEHICLE INSPECTION

DATE VEH. INSPECTED 8/19/93

## REASON VEHICLE NOT INSPECTED

- (0) Not Required
- (1) Inspection Completed
- (2) Cannot be Located\*\*
- (3) Repaired or Destroyed\*\*
- (5) Refual or Impounded\*\*
- (7) Other\*

\*\*Specify: Exterior repairedinterior not yet repaired

## IMPACT DATA OBTAINED

- (0) No Data Obtained
- (1) CDC Only
- (2) Crush Profile Only
- (3) Trajectory Data Only
- (4) CDC and Crush Profile
- (5) CDC and Trajectory
- (6) Crush and Trajectory
- (7) CDC, Crush & Trajectory

## BASIS OF DELTA-V

- (0) Not Computed (Unknown Why)
- (1) CRASH - Damage Only
- (2) CRASH - Damage+Trajectory
- (3) Missing Vehicle Algorithm
- (4) Yielding Object Algorithm
- (5) Unknown Basis
- (6) One Vehicle Beyond Scope
- (7) Collision Beyond Scope
- (8) Insufficient Data

## VEHICLE HISTORY

HAS AIRBAG VEHICLE BEEN IN  
ANY PRIOR IMPACTS (1,2,9)\*HAS ANY PRIOR MAINTENANCE/SERVICE  
BEEN PERFORMED ON SYSTEM(1,2,9)\*

\*Describe: \_\_\_\_\_

AIRBAG VEHICLE: FLEET PrivateVIN 2B3EMILEAGE 6659 miles

\* (1)=Yes, (2)=No, (9)=Unknown

DRAFT - 09/04/85

## READINESS LAMP, FIRST HARM

## AIRBAG SUPPLEMENT AB-2

STEM READINESS LAMP  
(in Instrument Cluster)

## PRE-IMPACT LAMP CONDITION

- (1) Functioning/ProvedOut  
(2) Inoperative  
(9) Unknown

DRIVER'S REPORT OF  
PRE-IMPACT FLASHING

- (01) Continuous Flashing  
(02) -- >Number of Flashes  
(11)  
(12) Constant Light  
(19) Flashing, Unkn Number  
(88) Not App (system removed)  
(99) Unknown

## PERIOD OF PRE-IMPACT FLASHING

- (0) No Flashing  
(1) Same Day as Impact  
(2) Prior Day  
(3) Prior Two Days  
(4) Prior Week  
(5) Prior Month  
(6) Over One Month  
(9) Unknown

## POST-IMPACT LAMP CONDITION

- (1) Functioning/ProvedOut  
(2) Inoperative  
(9) Unknown

## POST-IMPACT FLASHING

- (00) No Flashing  
(01) Continuous Flashing  
(02) -- >Number of Flashes  
(11)  
(12) Constant Light  
(19) Flashing, Unkn Number  
(88) Not Appl (removed)  
(99) Unknown

AIRBAG VEHICLE  
FIRST HARMFUL EVENT13

- (01) Fire or explosion  
(02) Immersion  
(03) Gas Inhalation  
(04) Fell from vehicle  
(05) Injured in vehicle  
(06) Other noncollision (specify):  
(07) Overturn  
(08) Jackknife with intraunit damage  
Collision With:  
(09) Pedestrian  
(10) Pedalcyclist  
(11) Railway train  
(12) Animal  
(13) Motor vehicle in transport (same roadway)  
(14) Motor vehicle in transport (other roadway)  
(15) Parked motor vehicle  
(16) Other type nonmotorist (specify):  
(17) Thrown or falling object  
(18) Boulder  
Collision with Fixed Object:  
(20) Building  
(21) Impact attenuator/Crash Cushion  
(22) Bridge pier or abutment  
(23) Bridge parapet end  
(24) Bridge rail  
(25) Guardrail  
(26) Concrete traffic barrier  
(27) Median barrier  
(28) Other longitudinal barrier (specify):  
(29) Highway/Traffic sign post  
(30) Overhead sign support  
(31) Luminaire/Light support  
(32) Utility pole  
(33) Other post, pole, or support (specify):  
(34) Culvert  
(35) Curb  
(36) Ditch  
(37) Embankment-earth  
(38) Embankment-rock, stone or concrete  
(39) Fence (wooden, wire, chain link, etc.)  
(40) Wall (stone, rock, metal, etc.)  
(41) Fire hydrant  
(42) Shrubbery  
(43) Tree  
(44) Other fixed object (specify):  
(45) Pavement surface irregularity (pothole, grooved, grates)  
(99) Unknown

## AIRBAG VEHICLE IMPACT SUMMARY

## VEHICLE ROLE

- (0) Non-collision  
 (1) Striking Unit  
 (2) Struck Unit  
 (3) Both Striking and Struck  
 (9) Unknown

## MANNER OF LEAVING SCENE

- (1) Driven  
 (2) Towed-due to damage  
 (3) Towed - not for damage  
 (4) Towed - details unknown  
 (5) Abandoned  
 (9) Unknown

## NUMBER OF IMPACT EVENTS

- (8) 8 or more, (9) Unknown

- ROLLOVER (0) No Rollover  
 (1) First Event  
 (2) Subsequent Event  
 (3) Yes, Unknown Event  
 (9) Unknown

## OVERRIDE/UNDERRIDE

- (0) No over/underride  
 (1) Override - 1st CDC  
 (3) - Other CDC  
 (4) Underride - 1st CDC  
 (6) - Other CDC  
 (9) Unknown

## AIRBAG VEHICLE DAMAGE

- CODES: (1) Yes, DAMAGED  
 (2) No Damage  
 (9) Unknown

## LEFT FRONT FENDER DAMAGE

## RIGHT FRONT FENDER DAMAGE

## CENTER TOP OF GRILLE DAMAGE

## FRONT BUMPER E.A. STATUS: Left

- (1) Normal Right  
 (2) Extended  
 (3) Partial Compression  
 (4) Complete Compression  
 (5) Not Applicable  
 (9) Unknown

## FIRST AIRBAG VEHICLE IMPACT:

## CONFIGURATION

- (0) Struck Object or Pedestrian  
 (1) Rear-End  
 (2) Head-On  
 (3) Rear-to-Rear  
 (4) Angle  
 (5) Sideswipe - Same Direction  
 (6) Sideswipe-Opposite Direct.  
 (7) NonCollision Fell from Veh  
 (8) Nonimpact Deployment  
 (9) Unknown

CDC 12 - F9EW - 9OBJECT CONTACTED: 1986 Buick Century 4 dr

## PRIMARY/DEPLOYMENT IMPACT:

## EVENT NUMBER

## TOTAL DELTA-V

## LONGITUDINAL DELTA-V

## CONFIGURATION

- (0) Struck Object or Pedestrian  
 (1) Rear-End  
 (2) Head-On  
 (3) Rear-to-Rear  
 (4) Angle  
 (5) Sideswipe - Same Direction  
 (6) Sideswipe-Opposite Direct.  
 (7) NonCollision Fell from Veh  
 (8) Nonimpact Deployment  
 (9) Unknown

CDC 12 - F9EW - 9OBJECT CONTACTED: 1986 Buick Century 4dr

## NOTES:

## SYSTEM DAMAGE

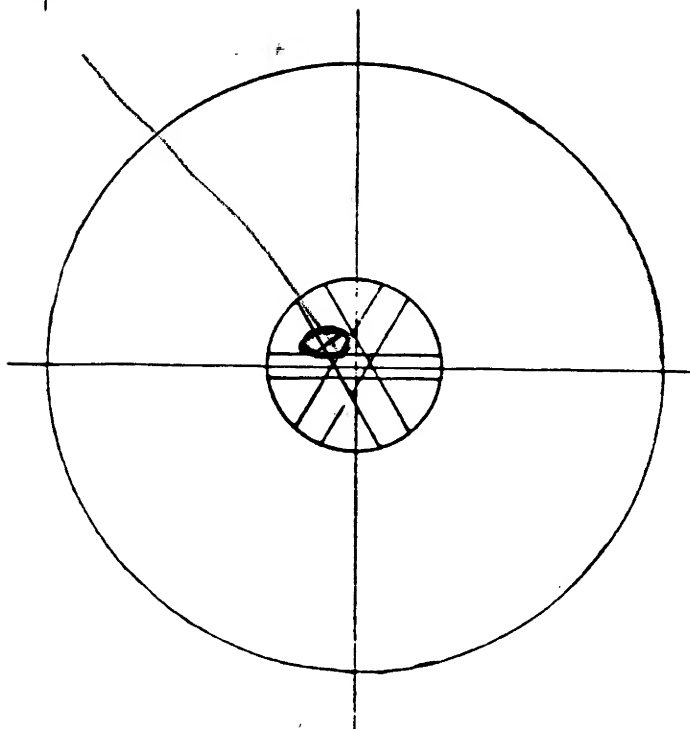
## AIRBAG SUPPLEMENT AB-4

<b>AIRBAG SYSTEM DAMAGE</b>  <b>COILS:</b> (1) Yes, Damaged* (2) No, Intact (8) Not App. (Removed) (9) Unknown  <b>AIRBAG MODULE</b>  <b>SENSORS:</b> Left Front Center Front Right Front Rear, Cowl  <b>DIAGNOSTIC MODULE</b>  <b>WIRING</b>  <b>KNEE DIVERTER</b>  <b>INDICATION OF DISCONNECTED OR LOOSE ELECTRICAL CONNECTORS</b>	<u>2</u> <u>9</u> <u>9</u> <u>9</u> <u>9</u> <u>9</u> <u>2</u> <u>2</u>	<b>CONDITION OF DEPLOYED BAG</b>  (1) Bag Intact (2) Split or Torn* (3) Cut by Object In Impact* (4) Cut after Accident* (5) Other (e.g., burned)* (8) N/A (not deployed) (9) Unknown	<u>1</u>
		<b>*DESCRIBE System and Bag Damage:</b>  <u>Driver Bag intact, lipstick marks</u> <u>from driver just left of center +</u> <u>just above center line</u>	

NOTE DAMAGE AND CONTACT MARKS ON AIRBAG DIAGRAMS BELOW:

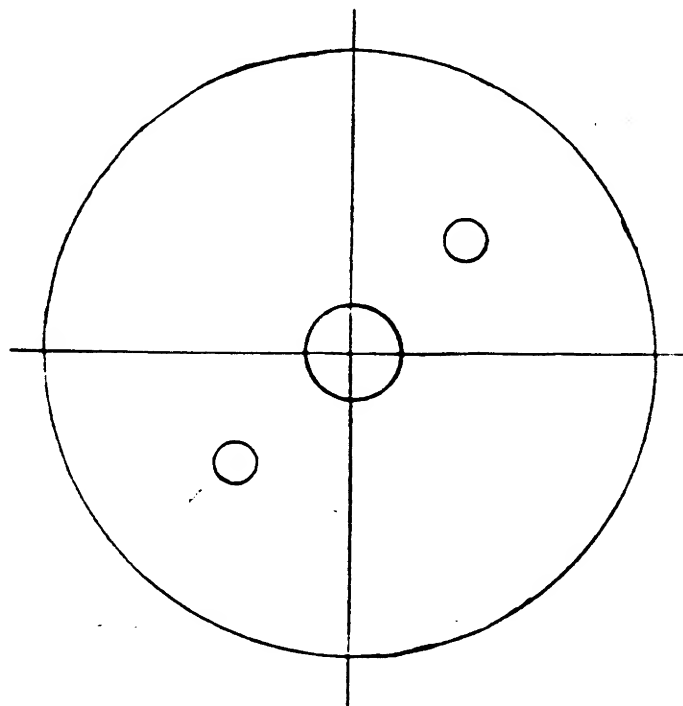
## DRIVER'S AIR BAG

Lip Stick Marks



FRONT

TOP



BOTTOM

BACK

SYSTEM DAMAGE

Passenger Air Bag

AIRBAG SUPPLEMENT

AB-4

## AIRBAG SYSTEM DAMAGE

CODES: (1) Yes, Damaged\*  
 (2) No, Intact  
 (8) Not App. (Removed)  
 (9) Unknown

## AIRBAG MODULE

SENSORS: Left Front

Center Front

Right Front

Rear, Cowl

## DIAGNOSTIC MODULE

## WIRING

## KNEE DIVERter

INDICATION OF DISCONNECTED  
 OR LOOSE ELECTRICAL  
 CONNECTORS

## CONDITION OF DEPLOYED BAG

(1) Bag Intact  
 (2) Split or Torn\*  
 (3) Cut by Object in Impact\*  
 (4) Cut after Accident\*  
 (5) Other (e.g., burned)\*  
 (8) N/A (not deployed)  
 (9) Unknown

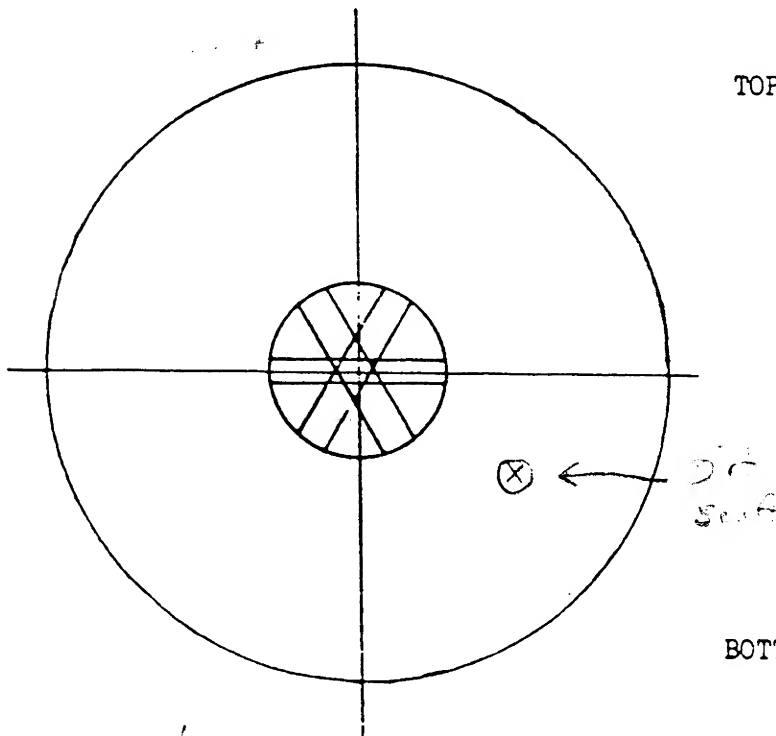
1

## \*DESCRIBE System and Bag Damage:

Passenger Air Bag intact, small  
 dirt scuff lower right quadrant

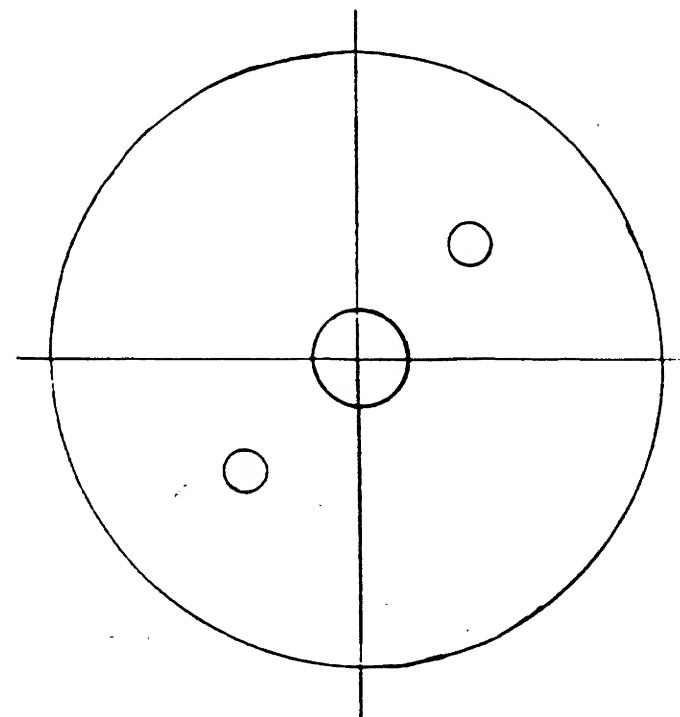
NOTE DAMAGE AND CONTACT MARKS ON AIRBAG DIAGRAMS BELOW:

Passenger Air Bag



FRONT

TOP



BOTTOM

BACK

## OCCUPANTS/DRIVER

AIRBAG SUPPLEMENT AB-5

## OCCUPANTS of AIRBAG CAR

NUMBER OF OCCUPANTS IN VEHICLE  
(8) 8 or more

NUMBER OF INJURED PERSONS

MAXIMUM AIS IN AIRBAG VEHICLE

(0) No Injury

(1-6) AIS Severity

(7) Injured, Unknown Severity

(9) Unknown

## NOTES:

AGE 37 SEX Female

NUMBER OF DRIVER INJURIES

SOURCE OF BEST INJURY DATA

(0) Not Injured

(1) Autopsy w/wo med. records

(2) Hospital Medical Records

(3) Emergency Room only

(4) Private physician, Clinic

(5) Lay Coroner Report

(6) EMS Personnel

(7) Interviewee

(8) Police

(9) Unknown

## MAXIMUM AIS BY BODY REGION

REGION	MAX AIS	CONTACT
Head/Neck/Face	<u>1</u>	<u>41</u>
Chest	<u>1</u>	<u>41</u>
Abdomen	<u>—</u>	<u>—</u>
Leg/Hips	<u>—</u>	<u>—</u>
Other (Arms)	<u>1</u>	<u>45</u>

DRIVER MAXIMUM

EJECTION: Extent N/APortal —

## DRIVER-PASSENGER

AIRBAG SUPPLEMENT AB-6

**DRIVER BELT USAGE:** (1) Used (2) Not Used (9) Unknown 1

Evidence: peening on tab, slight stretching, PAR, interview

**DRIVER POSTURE:** Any Comments Recorded (1) Yes, (2) No 1

Describe driver's posture and position on seat including specific comments on head, torso, buttocks, legs and feet. Also note hand and arm position. Did driver brace before crash? Describe:

Pre Impact: Normal, upright directly behind steering wheel, left foot on floor, right foot on accelerator, both hands on wheel (10+2 o'clock)  
Post Impact: Reached to brake pedal at impact

**DRIVER FOREIGN OBJECTS:** Comments Recorded (1) Yes, (2) No 1

Was driver wearing contact lenses or eyeglasses? Or holding any foreign object at the time of the impact (packages on lap, pipe, food, bottle, cigarette, etc.)? Did any lenses, objects, or jewelry play any role?:

Eyeglass were worn, did not get damaged or leave face,  
did not harm air bag; one ring on each hand, no damage  
to rings or airbag however a contusion to (4) ring finger was noted

**DRIVER COMMENTS:** Comments Recorded (1) Yes, (2) No 1

Was the driver aware that the vehicle was equipped with a supplemental restraint system? Did driver offer any comments on smoke, noise, etc.? Did the driver comment on the airbag as a restraint system? Describe:

1st thought after impact was that car was on fire due to "smoke" presence,  
then recalled car dealer informing her of "smoke" or powder from air bag  
deployment, exited vehicle anyway - as precaution - assisting 3 children out as  
well - felt Air Bag worked very well + claimed to never own a vehicle w/out one

**PASSENGER-AIRBAG CONTACT** (1) Yes, (2) No, (9) Unknown 1

Describe: Passenger Air Bag deployed apparently at same instant as  
driver's Air Bag, small dirt scuff observed in lower right quadrant  
of air bag



Dup. Cols. 1-8  
from prior card

Module A B

Format Q 1

## AIRBAG SUPPLEMENT

**AB-1**

## ACCIDENT SUMMARY

ACCIDENT DATE 11/15/93

POLICE INVESTIGATED (1,2,9)\*

City \_ \_ \_ \_ County \_ \_ \_

GENERAL LOCALITY

- (1) Freeway, Limited Access
- (2) Urban (City)
- (3) Urban-Rural (mixed)
- (4) Rural, Fields

### CONFIGURATION (First Harm)

- (0) Struck Object or Pedestrian
- (1) Rear-End
- (2) Head-On
- (3) Rear-to-Rear
- (4) Angle
- (5) Sideswipe-Same Direction
- (6) Sideswipe-Opposite Direct.
- (7) NonColl:eg Fell from Veh
- (8) NonImpact Deployment
- (9) Unknown

FIRE INVOLVED (0) None

- (1) AirBag Vehicle  
(2) Other Vehicle  
(3) Both Vehicles  
(9) Unknown

NUMBER: VEHICLES INVOLVED  
(8)=8 or more  
PERSONS INVOLVED

INJURED PERSONS

MAXIMUM AIS IN ACCIDENT

OTHER VEHICLE: MAXIMUM AIS

PRIME/DEPLOY IMPACT w AB VEH:  
EVENT NUMBER

CDC 02-LDEW-3

TOTAL DELTA-V

Model Year, Make, Model, Body Type:

1986 Buick Century

# AIRBAG VEHICLE INSPECTION

DATE VEH. INSPECTED [REDACTED]/93

## REASON VEHICLE NOT INSPECTED

- (0) Not Required  
(1) Inspection Completed  
(2) Cannot be Located\*\*  
(3) Repaired or Destroyed\*\*  
(5) Refual or Impounded\*\*  
(7) Other\*

**\*\*Specify:**

IMPACT DATA OBTAINED

- (0) No Data Obtained
- (1) CDC Only
- (2) Crush Profile Only
- (3) Trajectory Data Only
- (4) CDC and Crush Profile
- (5) CDC and Trajectory
- (6) Crush and Trajectory
- (7) CDC, Crush & Trajectory

## BASIS OF DELTA-V

- (0) Not Computed (Unknown Why)
- (1) CRASH - Damage Only
- (2) CRASH - Damage+Trajectory
- (3) Missing Vehicle Algorithm
- (4) Yielding Object Algorithm
- (5) Unknown Basis
- (6) One Vehicle Beyond Scope
- (7) Collision Beyond Scope- Shagging
- (8) Insufficient Data Occurred

## VEHICLE HISTORY

HAS AIRBAG VEHICLE BEEN IN  
ANY PRIOR IMPACTS (1,2,9)\*

HAS ANY PRIOR MAINTENANCE/SERVICE  
BEEN PERFORMED ON SYSTEM(1,2,9)\*

**\*Describe:**

AIRBAG VEHICLE: FLEET Private

VIN 3P3XP64K2NT

MILEAGE 12,372 miles

DRAFT - 09/04/85

\* (1)=Yes, (2)=No, (9)=Unknown

# READINESS LAMP, FIRST HARM

# AIRBAG SUPPLEMENT AB-2

## SYSTEM READINESS LAMP (In Instrument Cluster)

### PRE-IMPACT LAMP CONDITION

- (1) Functioning/ProvedOut
- (2) Inoperative
- (9) Unknown

### DRIVER'S REPORT OF PRE-IMPACT FLASHING

- Flashing Reported
- (01) Continuous Flashing
  - (02) -- >Number of Flashes
  - (11)
  - (12) Constant Light
  - (19) Flashing, Unkn Number
  - (88) Not App (system removed)
  - (99) Unknown

### PERIOD OF PRE-IMPACT FLASHING

- (0) No Flashing
- (1) Same Day as Impact
- (2) Prior Day
- (3) Prior Two Days
- (4) Prior Week
- (5) Prior Month
- (6) Over One Month
- (9) Unknown

### POST-IMPACT LAMP CONDITION

- (1) Functioning/ProvedOut
- (2) Inoperative
- (9) Unknown

### POST-IMPACT FLASHING

- (00) No Flashing
- (01) Continuous Flashing
- (02) -- >Number of Flashes
- (11)
- (12) Constant Light
- (19) Flashing, Unkn Number
- (88) Not Appl (removed)
- (99) Unknown

## AIRBAG VEHICLE FIRST HARMFUL EVENT

13

- (01) Fire or explosion
- (02) Immersion
- (03) Gas Inhalation
- (04) Fell from vehicle
- (05) Injured in vehicle
- (06) Other noncollision (specify):
- (07) Overturn
- (08) Jackknife with intraunit damage
- Collision With:
- (09) Pedestrian
- (10) Pedalcyclist
- (11) Railway train
- (12) Animal
- (13) Motor vehicle in transport (same roadway)
- (14) Motor vehicle in transport (other roadway)
- (15) Parked motor vehicle
- (16) Other type nonmotorist (specify):
- (17) Thrown or falling object
- (18) Boulder
- Collision with Fixed Object:
- (20) Building
- (21) Impact attenuator/Crash Cushion
- (22) Bridge pier or abutment
- (23) Bridge parapet end
- (24) Bridge rail
- (25) Guardrail
- (26) Concrete traffic barrier
- (27) Median barrier
- (28) Other longitudinal barrier (specify):
- (29) Highway/Traffic sign post
- (30) Overhead sign support
- (31) Luminaire/Light support
- (32) Utility pole
- (33) Other post, pole, or support (specify):
- (34) Culvert
- (35) Curb
- (36) Ditch
- (37) Embankment-earth
- (38) Embankment-rock, stone or concrete
- (39) Fence (wooden, wire, chain link, etc.)
- (40) Wall (stone, rock, metal, etc.)
- (41) Fire hydrant
- (42) Shrubbery
- (43) Tree
- (44) Other fixed object (specify):
- (45) Pavement surface irregularity (pothole, grooved, grates)
- (99) Unknown

9

99

9

2

99

## AIRBAG VEHICLE IMPACT SUMMARY

## VEHICLE ROLE

- (0) Non-collision  
 (1) Striking Unit  
 (2) Struck Unit  
 (3) Both Striking and Struck  
 (9) Unknown

## MANNER OF LEAVING SCENE

- (1) Driven  
 (2) Towed-due to damage  
 (3) Towed - not for damage  
     - Towed - details unknown  
 (5) Abandoned  
 (9) Unknown

## NUMBER OF IMPACT EVENTS

- (8) 8 or more, (9) Unknown

- ROLLOVER (0) No Rollover  
 (1) First Event  
 (2) Subsequent Event  
 (3) Yes, Unknown Event  
 (9) Unknown

## VERRIDE/UNDERRIDE

- (1) No over/underride  
 (1) Override - 1st CDC  
 (3) - Other CDC  
 (4) Underride - 1st CDC  
 (6) - Other CDC  
 (9) Unknown

## AIRBAG VEHICLE DAMAGE

- CODES: (1) Yes, DAMAGED  
 (2) No Damage  
 (9) Unknown

## LEFT FRONT FENDER DAMAGE

## RIGHT FRONT FENDER DAMAGE

## CENTER TOP OF GRILLE DAMAGE

## FRONT BUMPER E.A. STATUS: Left

- (1) Normal  
 (2) Extended  
 (3) Partial Compression  
 (4) Complete Compression  
 (5) Not Applicable  
 (9) Unknown

## FIRST AIRBAG VEHICLE IMPACT:

## CONFIGURATION

- (0) Struck Object or Pedestrian  
 (1) Rear-End  
 (2) Head-On  
 (3) Rear-to-Rear  
 (4) Angle  
 (5) Sideswipe - Same Direction  
 (6) Sideswipe-Opposite Direct.  
 (7) NonCollision Fell from Veh  
 (8) NonImpact Deployment  
 (9) Unknown

CDC 12 - FLAE 9OBJECT CONTACTED: V3

## PRIMARY/DEPLOYMENT IMPACT:

EVENT NUMBER (1st event) 2TOTAL DELTA-V 99LONGITUDINAL DELTA-V 99

## CONFIGURATION

- (0) Struck Object or Pedestrian  
 (1) Rear-End  
 (2) Head-On  
 (3) Rear-to-Rear  
 (4) Angle  
 (5) Sideswipe - Same Direction  
 (6) Sideswipe-Opposite Direct.  
 (7) NonCollision Fell from Veh  
 (8) NonImpact Deployment  
 (9) Unknown

CDC 12 - FLAE - 9OBJECT CONTACTED: V3

NOTES: 140 cm of contact damage down  
 @ side hence extent zone 9  
 Vehicle snagged during impact  
 hence 2% calculation

## SYSTEM DAMAGE

## AIRBAG SUPPLEMENT

AB-4

## AIRBAG SYSTEM DAMAGE

COILS: (1) Yes, Damaged\*  
 (2) No, Intact  
 (8) Not App. (Removed)  
 (9) Unknown

## AIRBAG MODULE

SENSORS: Left Front

Center Front

Right Front

Rear, Cowl

## DIAGNOSTIC MODULE

## WIRING

## KNEE DIVERTER

INDICATION OF DISCONNECTED  
 OR LOOSE ELECTRICAL  
 CONNECTORS

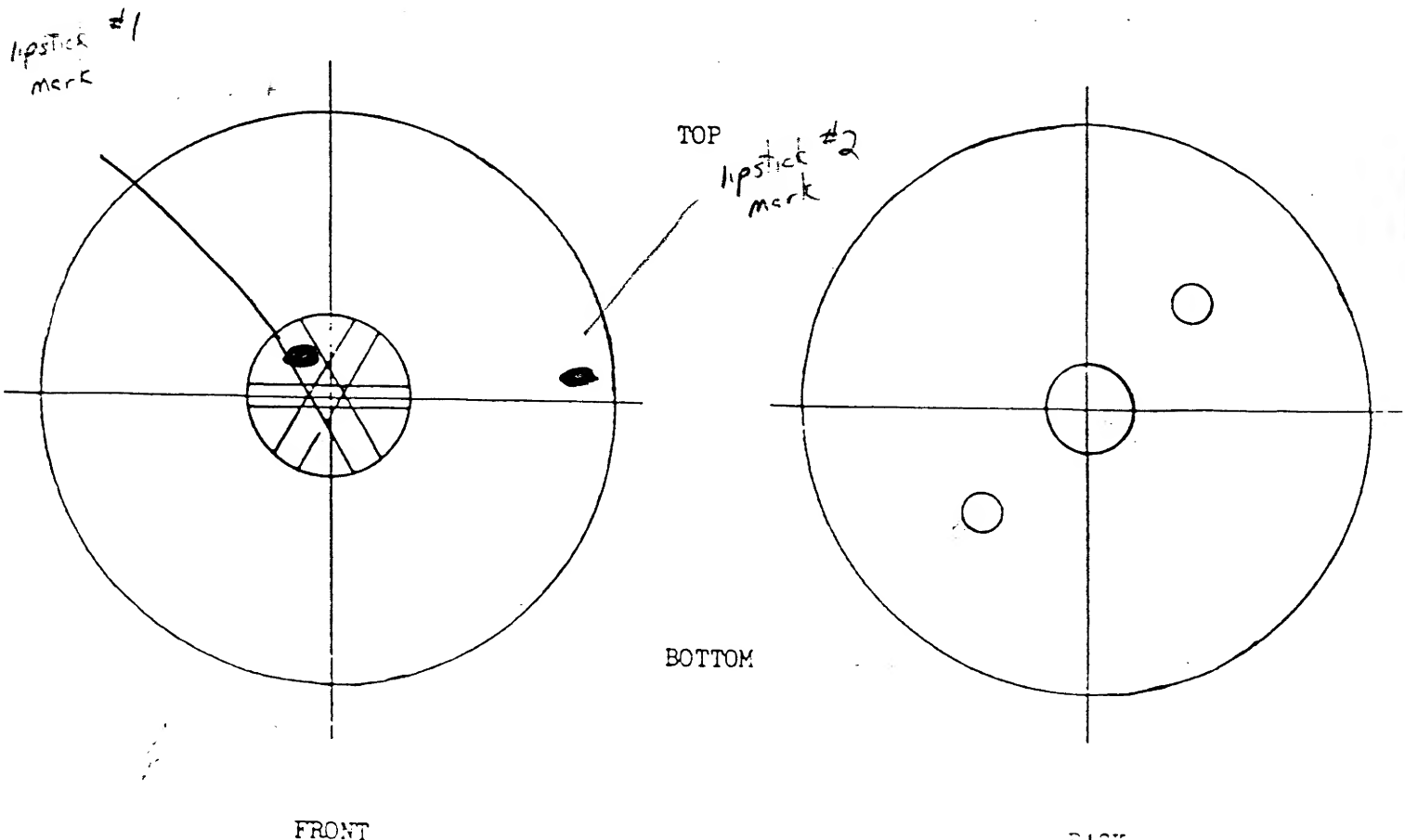
## CONDITION OF DEPLOYED BAG

(1) Bag Intact  
 (2) Split or Torn\*  
 (3) Cut by Object in Impact\*  
 (4) Cut after Accident\*  
 (5) Other (e.g., burned)\*  
 (8) N/A (not deployed)  
 (9) Unknown

## \*DESCRIBE System and Bag Damage:

2 separate lipstick marks  
multiple events occurred, #1 impact  
w/ V3 (deployment event, event #2 in overall  
accident), this veh. then rolled 1/4  
turn onto (R) side + impacted  
a pole (minor damage) w/ roof

NOTE DAMAGE AND CONTACT MARKS ON AIRBAG DIAGRAMS BELOW:



OCCUPANTS of AIRBAG CAR			NOTES:
NUMBER OF OCCUPANTS IN VEHICLE (8) 8 or more	<u>1</u>		
NUMBER OF INJURED PERSONS	<u>1</u>		
MAXIMUM AIS IN AIRBAG VEHICLE (0) No Injury (1-6) AIS Severity (7) Injured, Unknown Severity (9) Unknown	<u>1</u>		
AGE <u>26</u> SEX <u>Female</u>			
NUMBER OF DRIVER INJURIES	<u>2</u>		
SOURCE OF BEST INJURY DATA	<u>7</u>		
(0) Not Injured (1) Autopsy w/wo med. records (2) Hospital Medical Records (3) Emergency Room only (4) Private physician, Clinic (5) Lay Coroner Report (6) EMS Personnel (7) Interviewee (8) Police (9) Unknown			
-----			
MAXIMUM AIS BY BODY REGION			
REGION	MAX AIS	CONTACT	
Head/Neck/Face	<u>1</u>	<u>9</u> <u>1</u>	Flying Glass
Chest	---	---	
Abdomen	---	---	
Leg/Hips	---	---	
Other (Arms)	<u>1</u>	<u>4</u> <u>5</u>	air bag
DRIVER MAXIMUM	---	---	
-----			
EJECTION: Extent <u>N/A</u>			
Portal _____			

## DRIVER-PASSENGER

## AIRBAG SUPPLEMENT AB-6

**DRIVER BELT USAGE:** (1) Used (2) Not Used (9) Unknown 1

Evidence: peening on tab, slight stretching to webbing, PAR, interview

**DRIVER POSTURE:** Any Comments Recorded (1) Yes, (2) No 1

Describe driver's posture and position on seat including specific comments on head, torso, buttocks, legs and feet. Also note hand and arm position. Did driver brace before crash? Describe:

Normal, upright, both hands on wheel (10 - 2 o'clock), left foot on floor, (R) foot on accelerator

**DRIVER FOREIGN OBJECTS:** Comments Recorded (1) Yes, (2) No 1

Was driver wearing contact lenses or eyeglasses? Or holding any foreign object at the time of the impact (packages on lap, pipe, food, bottle, cigarette, etc.)? Did any lenses, objects, or jewelry play any role?:

No jewelry, was wearing contact lens (soft), they did not come out or cause any problems in accident

**DRIVER COMMENTS:** Comments Recorded (1) Yes, (2) No 1

Was the driver aware that the vehicle was equipped with a supplemental restraint system? Did driver offer any comments on smoke, noise, etc.? Did the driver comment on the airbag as a restraint system? Describe:

Driver felt that air bag worked as designed, no comments on noise or smoke, would get another vehicle w/ air bag

**PASSENGER-AIRBAG CONTACT** (1) Yes, (2) No, (9) Unknown 1

Describe: 2 separate lipstick marks on air bag, one near center and one to far right (corner) of air bag

## APPENDIX D



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## CRASHPC PROGRAM SUMMARY

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

### Identifying Title

NCSI  
Primary  
Sampling Unit

9304  
Case No.-Stratum

02  
Accident Event  
Sequence No.

93  
Date (Month, day, year) of Run

### CRASHPC Vehicle Identification

Vehicle 1 1992

Plymouth

Sundance

2

Vehicle 2 1986

Buick

Century

3

Year

Make

Model

NASS  
Veh. No.

## GENERAL INFORMATION

### VEHICLE 1

Size

2

Weight

157 + 61 +        = 1248 kg  
Curb Occupant(s) Cargo

CDC

12 F L A E 9

PDOF (-180 to +180)

± 350 °

Stiffness

9

### VEHICLE 2

Size

3

Weight

1220 + 80 +        = 1300 kg  
Curb Occupant(s) Cargo

CDC

10 L D E W 3

PDOF (-180 to +180)

⊕ 310 °

Stiffness

3

## SCENE INFORMATION

Rest and Impact Positions ☒ No, Go To Damage Information ☐ Yes

### VEHICLE 1

Rest  
Position

X        .        m  
Y        .        m  
PSI        °

Impact  
Position

X        .        m  
Y        .        m  
PSI        °

Slip Angle(-180 to +180)

       °

### VEHICLE 2

Rest  
Position

X        .        m  
Y        .        m  
PSI        °

Impact  
Position

X        .        m  
Y        .        m  
PSI        °

Slip Angle (-180 to +180)

       °

## VEHICLE MOTION

Sustained Contact ☐ No ☐ Yes

### VEHICLE 1

Skidding (Rotation)

☐ No ☐ Yes

Skidding Stop Before Rest ☐ No ☐ Yes

End of Rotation  
Position

X        .        m  
Y        .        m  
PSI        °

Curved Path

☐ No ☐ Yes

Point on Path

X        .        m Y        .        m

Rotation Direction

☐ None ☐ CW ☐ CCW

Rotation >360°

☐ No ☐ Yes

### VEHICLE 2

Skidding (Rotation)

☐ No ☐ Yes

Skidding Stop Before Rest ☐ No ☐ Yes

End of Rotation  
Position

X        .        m  
Y        .        m  
PSI        °

Curved Path

☐ No ☐ Yes

Point on Path

X        .        m Y        .        m

Rotation Direction

☐ None ☐ CW ☐ CCW

Rotation >360°

☐ No ☐ Yes



SUMMARY OF CRASHPC RESULTS USING DAMAGE

---

93-04

SPEED CHANGE  
(DAMAGE)

VEHICLE #1

TOTAL 30 KPH ( 19 MPH)  
LONGITUDINAL -29 KPH ( -18 MPH)  
LATITUDINAL 5 KPH ( 3 MPH)  
PDOF ANGLE -10 DEGREES  
ENERGY DISSIPATED = 20023 JOULES ( 14767 FT-LB)

VEHICLE #2

TOTAL 29 KPH ( 18 MPH)  
LONGITUDINAL -18 KPH ( -11 MPH)  
LATITUDINAL 22 KPH ( 14 MPH)  
PDOF ANGLE -50 DEGREES  
ENERGY DISSIPATED = 93229 JOULES ( 68753 FT-LB)

# DAMAGE DATA

	VEHICLE #1	VEHICLE #2
SIZE CATEGORY	2	3
STIFFNESS CATEGORY	9	3
VEHICLE WEIGHT	1248 KGS ( 2751 LBS)	1300 KGS ( 2866 LBS)
CDC	12FLAE9	10LDEW3
PDOF ANGLE	-10 DEGREES	-50 DEGREES
CRUSH LENGTH	141 CM. ( 56 IN.)	400 CM. ( 157 IN.)
C1	10 CM. ( 4 IN.)	0 CM. ( 0 IN.)
C2	5 CM. ( 2 IN.)	40 CM. ( 16 IN.)
C3	2 CM. ( 1 IN.)	25 CM. ( 10 IN.)
C4	0 CM. ( 0 IN.)	9 CM. ( 3 IN.)
C5	0 CM. ( 0 IN.)	5 CM. ( 2 IN.)
C6	0 CM. ( 0 IN.)	0 CM. ( 0 IN.)
D	0 CM. ( 0 IN.)	-25 CM. ( -10 IN.)
D'	-7 CM. ( -3 IN.)	-87 CM. ( -34 IN.)

(\* INDICATES DEFAULT VALUE)

# DIMENSIONS AND INERTIAL PROPERTIES -----

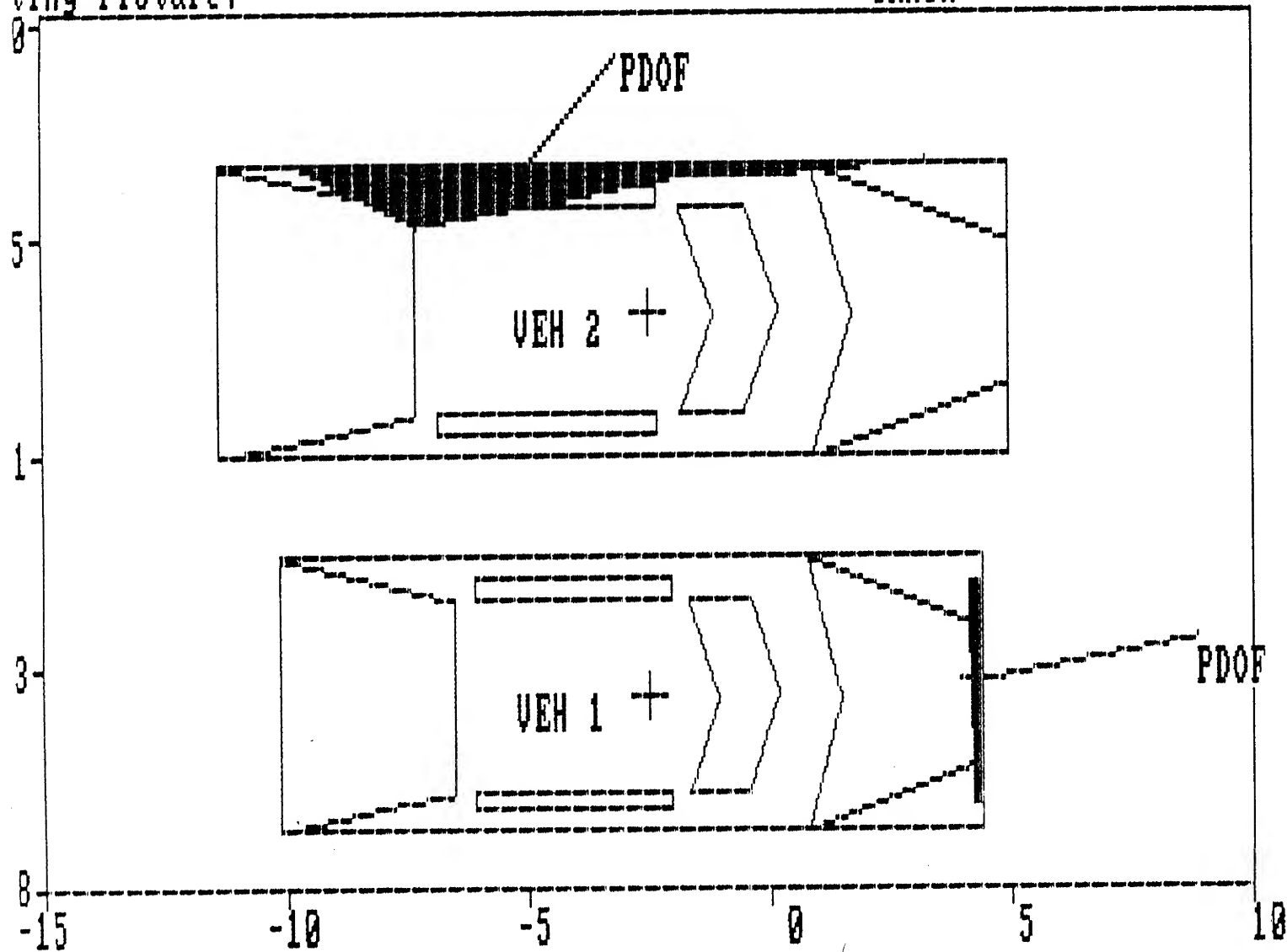
## VEHICLE #1

## VEHICLE #2

CG TO FRONT AXLE	118 CM. ( 46 IN.)	130 CM. ( 51 IN.)
CG TO REAR AXLE	127 CM. ( 50 IN.)	141 CM. ( 56 IN.)
TRACK	139 CM. ( 55 IN.)	150 CM. ( 59 IN.)
CG TO FRONT OF VEH	212 CM. ( 83 IN.)	228 CM. ( 90 IN.)
CG TO REAR OF VEH	-233 CM. ( -92 IN.)	-270 CM. (-106 IN.)
CG TO SIDE OF VEH	85 CM. ( 34 IN.)	92 CM. ( 36 IN.)
MOMENT OF INERTIA	9576 KGS ( 21111 LBS)	11236 KGS ( 24770 LBS)
VEHICLE MASS	3 KGS ( 7 LBS)	3 KGS ( 7 LBS)

ting Picture:

CRASH



DAMAGE DESCRIPTION

1993  
hth

PRELIMINARY SUMMARY  
NCSI Case 93-04  
Airbag Deployment Accident (Driver and Passenger Side)  
[REDACTED] Michigan

The NCSI In-depth accident investigation team was notified of this crash on [REDACTED] 1993 by [REDACTED] of NHTSA.

The accident occurred on [REDACTED] 1993 on a principal arterial roadway in [REDACTED], Michigan. The involved vehicles were as follows: a 1993 Dodge Intrepid (case vehicle) equipped with both a driver's side and passenger side airbag supplemental restraint system, a 1986 Buick Century, and a 1992 Plymouth Sundance equipped with a driver's side airbag supplemental restraint system. The accident was investigated on-site by the [REDACTED] Police Department.

The case vehicle was traveling southbound in the number three lane when it struck the Buick on the right rear quarter panel. The Buick, which was in the process of a left turn, rotated clockwise approximately 180 degrees and was then struck by the Plymouth which was traveling southbound in the number one lane. The Plymouth rotated counter clockwise, side slapping the Buick, then rolled one quarter turn and impacted a luminaire light pole with its roof.

Upon impact, both driver and passenger side airbags deployed in the case vehicle. Both front occupants were also properly restrained by the passive three-point lap and shoulder belt system of the vehicle. The driver is approximately 67 inches tall and weighs 150 pounds. The RF passenger is approximately 48 inches tall and weighs 70 pounds. Both front seats were in their forward most position. The driver stated that she was transported and released to a nearby hospital where she was treated for a whiplash type injury to the cervical and thoracic spine, an abrasion to the right forearm, and a contusion to the left ring finger. The RF passenger did not seek medical attention although claims an abrasion to the right leg just below the knee and swelling to all ten digits of both hands. Two rear seat passengers, who were properly restrained by lap and shoulder belts were not treated and claim no injuries.

The driver of the case vehicle stated that she believed that the car was on fire immediately after the accident but then recalled that the dealer had informed her that there would be a cloud of powder and smoke in the vehicle should the airbag be deployed. Nevertheless, she quickly exited the vehicle and removed the three child occupants. The driver further stated that the airbag system prevented probable serious injury to both her and the RF occupant and would not own another vehicle without both driver and passenger side airbags.

PHOTOGRAPH INDEX  
NCSI CASE 93-04

Photograph #1...Case Vehicle approach, looking south  
#2...Case Vehicle approach, looking south  
#3...Case Vehicle approach, looking south  
#4...Case vehicle approach, area of impact  
#5...Looking back over impact area, looking north  
#6...Struck vehicle approach, looking NW  
#7...Looking back, looking SE  
#8 through #12..Case Vehicle exterior (repaired)  
#13...View of Case Vehicle deployed airbags  
#14...View of Case Vehicle driver's airbag  
#15...View of Case Vehicle passenger airbag  
#16...Close-up of passenger airbag, dirt smudge























U.S. Department of Transportation

National Highway Traffic Safety  
Administration

## SLIDE INDEX

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEMPrimary Sampling Unit Number NC51Case Number—Stratum 9304

Slide No.	Vehicle No.	Direction of Picture	Description of Slide Subject Matter
1-4	1	S	Vehicle 1 Approach
5	1	N	Looking back over V1 approach
6-9	3	N	Veh. 3 approach prior to turning maneuver
10-14	3	NW	Veh. 3 approach through Left turn maneuver
15	3	SE	Looking back over V3 approach (turning maneuver)
16	3	S	Looking back over V3 initial approach
17-20	2	S	V2 Approach through impact with V3
21-22	2	S/SW	V2 approach to roll, impact with pole, + V2 FRP
23	2	N/NE	Looking back from V2 FRP
24-25	2	N	Looking back over V2 approach
26-27	1		V1 Identification - VIN
28-37	1		V1 Exterior - mostly repaired
38	1		V1 Interior - shot across front seat
39-42	1		V1 Driver's Air Bag
43-47	1		V1 Passenger's Air Bag
48-59	1		V1 Front Seat Interior showing contact points
60-61	1		V1 Rear View mirror (broken off from mount)
62	1		V1 Driver seat position controls - motorized seat
63-64	1		V1 Driver (LF) seat belt
65	1		V1 RF seat belt
66	1		V1 RR seat belt
67	1		V1 LR seat belt
68-73	1		V1 Rear Seat Interior showing contact points
74-95	2		V2 Exterior - showing damage + measurements
96-106	2		V2 Front seat interior showing contact points
107-110	2		V2 Driver's Air Bag
			(OVER)

[illegible]





NC9304 #1



NC 9304 #2



NC9304 #3



NC 9304 #4



NC 9304 #5



NC 9304 #6



NC 9304 #7



NC9304 #8





NC 9304 #9



NC9304 #10



NC 9304 #11



NC 9304 #12



NC 9304 #13



NC 9304 #14



NC 9304 #15



NC 9304 #16





NC9304 #17



NC 9304 #18



NC 9304 #19



NC 9304 #20



NC 9304 #21



NC 9304 #22



NC 9304 #23



NC 9304 #24





NC 9304 #25



NC 8304 #26



NC 9304 #27



NC 9304 #28



NC 9304 #29



NC 9304 #30



NC 9304 #31



NC 9304 #32





NC 9304 #33



NC 9304 #34



NC 9304 #35



NC9304 #36



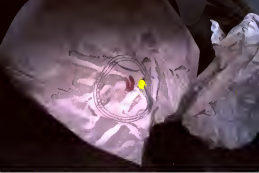
NC 9304 #37



NC 9304 #38



NC 9304 #39



NC 8304 #40

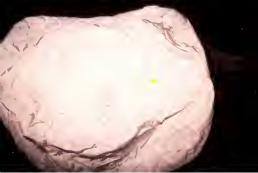




NC9304 #41



NC 9304 #42



NC 9304 #43



NC 9304 #44



NC 9304 #45



NC 9304 #46



NC 9304 #47



NC 9304 #48





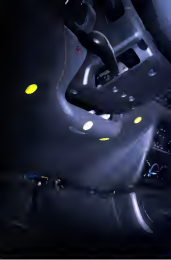
NC 8304 #49



NC 9304 #50



NC 9304 #51



NC 9304 #52



NC 9304 #53





NC 9304 #55



NC 9304 #56





NC 9304 #57



NC 9304 #58



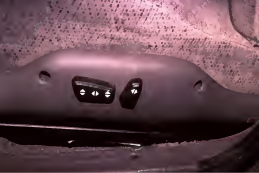
NC 9304 #59



NC 9304 #60



NC8304 #61



NC 9304 #62



NC 9304 #63



NC 9304 #64





NC 9304 #65



NC 9304 #66



NC 9304 #67



NC 9304 #68



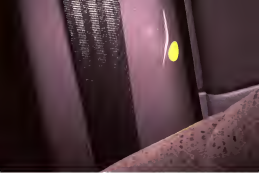
NC 9304 #89



NC 9304 #70



NC 9304 #71



NC 9304 #72







NC 9304 #74



NC 9304 #75



NC 9304 #76



NC 9304 #77



NC 9304 #78



NC 9304 #79



NC 9304 #80





NC 9304 #B1



NC 9304 #82



NC 9304 #83



NC9304 #84



NC 8304 #85



NC9304 #88



NC 9304 #87



NC 9304 #88





NC 9304 #89



NC 9304 #90



NC 9304 #91



NC 9304 #92



NC 9304 #93



NC 9304 #94



NC 8304 #95



NC 9304 #96





NC9304 #97



NC 8304 #88



NC 9304 #99



NC 9304 #100



NC 9304 #101



NC9304 #102



NC 9304 #103



NC 9304 #104





NC9304 #105



NC 9304 #106



NC 9304 #107



NC 9304 #108



NC9304 #109



NC 9304 #110



NC 9304 #111



NC 9304 #112





NC9304 #113



NC9304 #114



NC 9304 #115



NC 9304 #116



NC 9304 #117



NC9304 #118

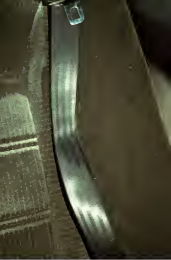


NC9304 #119



NC 9304 #120





NC9304 #121



NC 9304 #122



NC 9304 #123



NC 9304 #124



NC 9304 #125



NC 9304 #126



NC 9304 #127



NC 9304 #126





NC 9304 #129



NC 9304 #130



NC9304 #131



NC 9304 #132



NC 9304 #133



NC 9304 #134



NC 9304 #135



NC 8304 #136





NC9304 #137



NC 9304 #138



NC 9304 #139



NC 8304 #140



NC 9304 #141



NC9304 #142



NC 9304 #143



NC 9304 #144





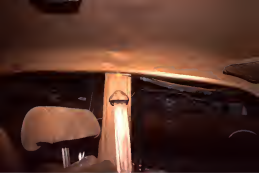
NC 9304 #145



NC 9304 #146



NC 9304 #147



NC 9304 #148



NC 9304 #149



NC 9304 #150



NC 9304 #151



NC 9304 #152





NC 9304 #153  
Best Available



NC 9304 #154



NC 9304 #155